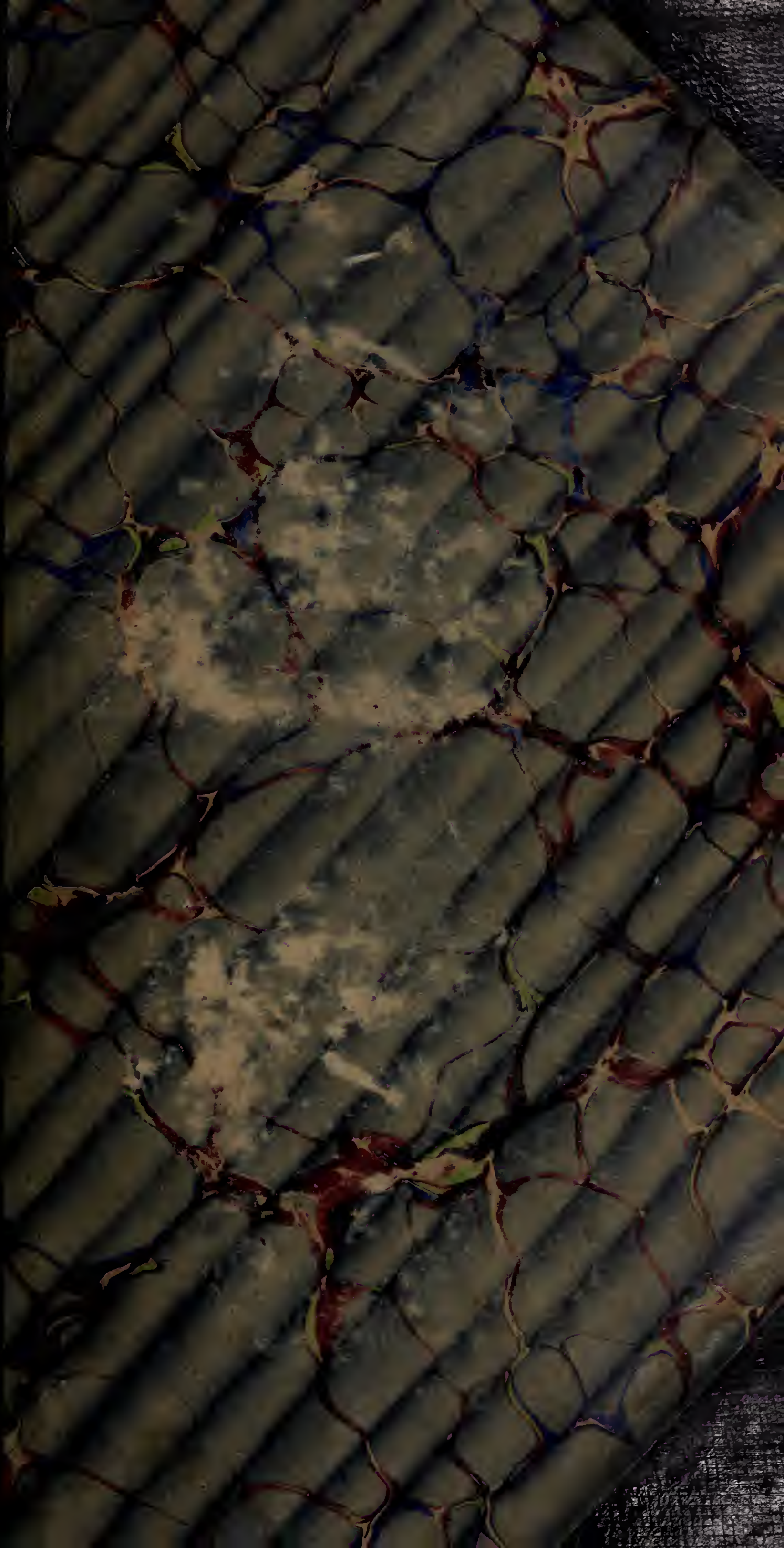

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No

THE CINCINNATI

LANCET AND OBSERVER.

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LANCET AND OBSERVER.

E. B. STEVENS, Editor.

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Original Communications.

Art. I.—Keloides.

By WILLIAM AUGUSTUS BROWN, M. D., Chevalier of the Imperial Ottoman Order of the Medjidieh, Brevet Lieutenant-Colonel U. S. Volunteers, etc.

Keloid is a name given by Alibert, who originally described the disease in 1810, to a small tumor developed in the subcutaneous areolar tissue, and characterized by red vascular processes, which give an appearance of crabs' claws. The morbid growth which essentially constitutes the keloid of Alibert, takes place in the subcutaneous areolar tissue, between the skin and adipose membrane, and is an affection which is comparatively rare. It may first appear in the form of one or more small, hard, shining, tubercular-looking elevations, of a roundish or oval shape, attended with itching and pricking pains. The growth of these tumors may proceed for years, and at last attain the size, usually, of an inch or two inches in length and a quarter of an inch in breadth; these dimensions, however, are sometimes very considerably exceeded. The situation is almost always over or near the sternum, and between and upon the mammæ in females. At an uncertain period the tumor becomes somewhat irregular in shape, and displays small, tendinous-looking lines, mingled with small blood vessels of a bluish or purple color, with tapering claw-like processes proceeding from the ends and angles. An objection may be offered to the name, inasmuch as the idea of the crab's claw appearance has given origin to the name of a different and common disease, cancer; and, moreover, keloid disease is not invariably characterized by the vascular processes. Dr. Warren makes three varieties of the disease. 1. A white, permanent elevation of the skin, in the form of the cicatrix of a burn, and sometimes originating in such cicatrix; without discoloration, or very slightly discolored margin; not sensible or painful; differing from the cicatrix of a burn in its disposition to grow, and the difficulty of eradicating it; does not ulcerate or terminate in malignant disease. 2. A small red pimple, appearing most commonly on the face, radiating red processes into the surrounding skin; size of the body of the tumor usually about one-eighth of an inch, the rays sometimes extending half an inch around it. For a long time after its existence there is no pain or any uneasy sensation. After having continued for years, it assumes a prickling, and finally a burning pain; increases in size, ulcerates, and assumes a cancerous character; never becomes malignant in children or young adults, but in the decline of life, especially in persons who have lived freely. 3. The keloid of Alibert. Like the first, it resembles, in the earlier stages, the cicatrix of a burn. In color it is more red than the surrounding skin, and shoots out red vascular processes, which have the appearance of crabs' claws. The elevation is not great in the common form of the disease; it is sensible to the touch, and attended with a burning, prickling pain. The parts most frequently its seat are the chest, back, shoulders, and neck. It may regenerate after removal, and this may happen a number of times. It may eventually ulcerate and become a malignant sore.

On dissection, it exhibits a white fibrinous appearance, much like the schirro-cancerous deposit in the female breast. It is of dense, firm consistence, with little elasticity, and creaks slightly under the knife. It belongs to the class of fibro-plastic growths. Under the microscope, fibres will be observed to cross each other in every possible direction, intercepting spaces occupied by plastic matter of a softer nature. Hardly any vessels will be observed in the interior of the growth.

Dr. Gross, speaking from his large experience, doubts the proneness of the disease to appear upon the chest, and states that it rarely, if ever, degenerates into malignancy; that he never saw a case exhibit such a tendency. He thinks it less rare than generally supposed, and that the division of the disease into several varieties is hardly warrantable; ascribes to it a generally traumatic origin, succeeding upon some local injury, often of a trivial character, the most common exciting causes being scalds and burns. It has been known to appear in a vaccine scar, and the cicatrices left by small-pox, to follow cupping, a blister, and contact with nitric acid. When its origin is spontaneous, it is not always confined to two or three patches, but may appear extensively over the surface of the body, as in a notable case of a negro, described and figured by Dr. Gross, where "it seemed as if the individual was laboring under a keloid diathesis."

Dr. Addison, of London, described before the Medical and Chirurgical Society a form of skin disease which he called *true keloid*, which "originates in the subcutaneous cellular tissue, and is first indicated by a white patch or opacity of the integument, roundish oval shape, scarcely elevated above the surrounding skin, unattended by any local pain or inconvenience, and a more or less vivid zone of redness surrounding the patch. When the patch attained some size, its surface presented a faint yellowish or brownish tint, giving a mottled appearance. With the progress of the disease a hardness and rigidity of the part occurred, accompanied by itching and a sense of pain and constriction, the color changing to reddish, yellowish, or dead-leaf color. The cutis then manifests a disposition to superficial ulceration, and when not excoriated there were often seen tubercular or nodular elevations, the whole resembling the remains of an extensive and imperfectly cicatrized burn. From the boundary of the discolored skin might now be seen tapering, claw-like processes, like the keloid of Alibert." Another case has been published as "true keloid," in which the patient, a young woman, presented a left breast with a diseased surface at the upper part, extending four inches in length by an inch and three-quarters in breadth, presenting a perfectly smooth and polished surface of an opaque, yellowish-white color, like polished vellum or ivory, the margin of the diseased portion defined by a strongly marked border of injected vessels, but on the polished surface no vascularity perceptible. No exudation on any part of the breast; no crust or scurf of any kind. The breast larger than its fellow, and when handled presented several hard, resisting, nodulated tumors. No pain experienced by the patient. Mr. Hodgson was consulted, and pronounced an unfavorable prognosis, as it bore some resemblance to a case which ultimately displayed itself as carcinoma. Sir Benjamin Brodie, who was subsequently consulted in this case, could only adduce a single similar one, in which the process of cure had been effected by throwing off successive layers of diseased skin, during which the extent of surface became continually reduced, the skin beneath ultimately assuming its natural aspect. The treatment was alkaline alteratives, with local application of iodine. In six months the breast had returned to its natural state, the disease, including period of treatment, having continued eighteen months.

The description of these cases might justify the inference that they were nearly allied to lupus. They are certainly quite different from the keloid described by Alibert, and their classification under the head of keloid tends to confusion.

The treatment of the keloid of Alibert is very unsatisfactory. Dr. Gross states that, so far as he knows, "there is no remedy which will exercise the slightest influence in arresting its development or promoting its removal. Sorbefacients and alterants of every description, and in every form of combination, and in every variety of dose, have been employed, and yet I am not aware of a solitary instance in which their exhibition, however protracted, has been followed by a cure, or even a tendency toward such a result." As to excision, he is decidedly opposed to it. It is only when it interferes with a natural outlet, or becomes a source of great disfigurement, that it should be considered as warrantable. It almost invariably returns after removal, and this disposition seems to be the special characteristic of the disease. "Rising with increased activity, like the phœnix from its ashes, so that the second state is much worse than the first." If ulceration should occur, it should be treated in the ordinary manner, on general principles. There can be little doubt that keloid has sometimes degenerated into malignancy, though this result is so very unfrequent that it may safely be pronounced to be a harmless disease, although troublesome, and frequently attended with considerable pain. In some cases the tumors remain completely stationary for a long time; in others, they gradually advance to a considerable bulk, and then become passive, and so continue for many years. "Occasionally, in consequence, apparently, of prolonged pressure or local irritation, they take on ulcerative action;" and again, on the contrary, the absorbents have been excited by the same means, and their gradual extinction ensue, as in the following cases, which came under my observation:

I. The patient, a gentleman of medium size, nervous temperament, active habits. In early life a small, subcutaneous tubercle, appeared about midway over the sternum, which continued to enlarge very slowly until it attained the size of a buckshot, when it was removed with a penknife by the patient himself. Immediately the citratrix manifested evidences of diseased growth; began slowly to enlarge, and became painful—sharp, burning, and lancinating pains, of irregular intensity and duration. During six or eight years, it continued gradually to enlarge until it had attained the size of an almond hull, having given the patient much pain and been the cause of great mental distress, as he believed it was of malignant character.

He now called a surgeon, who removed the growth by the knife, making two oblong incisions, about half an inch away from the sides of the tumor, which was then raised with a tenaculem, and the flesh removed freely at the base. It was apparently a thorough operation, the morbid growth and a considerable part of the adjacent tissue being removed. As soon as the wound healed, the cicatrix presented the same characteristics both as to appearance and the darting pains, and the tumor was of twice the former size. Several years afterward, the patient put himself under the care of an irregular practitioner, and submitted to an attempt to remove the disease by means of a caustic application. The escharotic covered a space almost as large as the mouth of a teacup, and was attended by most intense suffering. The tissues were destroyed to a considerable depth. The sore healed, in due time, leaving a large cicatrix, but very soon the disease began to manifest itself in this large scar. Finally, and about twenty years after the first appearance of the little subcutaneous tubercle, the patient went to a hydropathic establishment for dyspepsia, and whilst there, in consequence probably of the frequent and long frictions over the breast with a flesh brush following the baths administered to him, the scar "gathered," as he stated, and discharged about half an ounce of a yellowish ichor, after which it began gradually to pass away, losing its former appearance, and being wholly free from pain. The patient lived several years after this, ultimately dying of phthisis, but never suffered any pain or annoyance afterward from what had been a source of physical and mental suffering for almost twenty-five years.

II. The patient is a brother of the above. When about eighteen years of age, he one day noticed a small pimple on his breast over the symphisis of the first and second bones of the sternum. It had the appearance of a distended sebaceous follicle, but, upon pressure, yielded no matter. In the course of a month or two he noticed that the pimple had not disappeared, and upon squeezing the skin between his fingers, was sensible of a small tubercle like a bird-shot. No further attention was given to it, but in the course of a year or more it was found to have increased to the size of a pea, and began now to be occasionally painful. The growth continued very slowly until, after eight years, it had attained a length of an inch and a half by a quarter of an inch wide; and displayed the characteristic appearance of keloid. He had suffered in the meantime from frequent paroxysms of sharp, lancinating pains, running to the shoulder and up to the neck. There now appeared another point of disease, about two inches below, which ran through the same course and presented the same characteristics as the former. In about sixteen years the first growth was two and a half inches long, and about half an inch wide; the second an inch and a half long, and a quarter of an inch wide, both lying transversely across the sternum. The pain was not constant nor at all times severe, but the paroxysms were frequent, of sharp, cutting pains, darting from the tumors to the neck and left shoulder. Brisk friction, with the hand, relieved to some extent the pain, and the patient states that he would sometimes tear the buttons off his shirt in his haste to afford himself relief by this means. The want of success which had attended the attempts to cure his brother, and a fear that it might develop a malignant character, and had better be let alone, deterred him from submitting to any kind of treatment. One day, while attending to his affairs, a heavy box fell against him, the edge striking upon these two small tumors on his breast. The pain resulting from this accident is described as being most excruciating, and continuing for some hours. In a few weeks, it was observed that the painful symptoms were less frequent and less severe than formerly, and believing this amelioration was due to the late blow, he adopted the plan of squeezing the keliods between his thumb and finger, increasing the pressure by the use of both hands. This was done generally at night; during the day frequent and brisk friction with the hand. This course was followed up for several months, and both of these troublesome tumors were observed to gradually fade away, and become free from pain, leaving a white scar like an old cicatrix.

Art. II.—Pseudo-membranous Croup.

By ROSS C. RUSS, M. D., Hillsboro, Ohio.

Pseudo-membranous croup by the ancients seems to have been confounded with other diseases of the respiratory organs. But it is due Baillou of Paris, who, in 1576, was the first to indicate by investigation the anatomical characters of this exceedingly grave and formidable disease.

This disease is characterized by a fibrinous or mucinous exudation, which concretes not unfrequently very rapidly upon the surface of the epithelial layer of the mucous tissue of the larynx; not unfrequently extending down the trachea and bronchi; sometimes, but rarely, producing croupous pneumonia.

Pathologically, pseudo-membranous croup is a blood disease, there being a strong "correlation" between it and diphtheria, and it may prevail epidemically or sporadically, differing only from diphtheria in its mode of deposit, its sequence, duration, etc.

The plexus of blood vessels in immediate relation with a stratum of epithelial "cells" of the larynx, together with its contiguous parts, is in a highly hyperemic state. There is indubitable evidence that the normal constituents of the blood have undergone a change due to some extrinsic or intrinsic cause. Perhaps the most reasonable probability is that the cause or causes are due to a zymotic origin in producing pseudo-membranous croup.

Therefore, all observation concurs in showing indubitable evidence that any cause which has a tendency to depress the "vital forces" of the system, and more particularly obstructs or prevents the due purification of the blood by the free elimination of the products of decomposition, favors this exceedingly dangerous zymotic disease.

And, indeed, that it is not a mere hypothetical entity, but has a real material existence, appears from this consideration, that in all those conditions of the system in which it is evinced by extended and repeated observation, there are "blood changes" going on to an unusual extent.

Therefore, unequivocally, the blood serves as the appropriate soil for the seeds by which pseudo-membranous croup is produced. The very nature of this disease being self-eliminative, and not unlike other zymotic diseases in this respect, selects certain parts or structures for its elimination, and may very appropriately be embodied in the ancient aphorism, "*Ubi stimulus, ibi flexus*," producing thereby local excitement of the muscular and nervous structures of the larynx.

Those having been called to witness cases of pseudo-membranous croup, and have studied closely the anatomy and physiology of the juvenile larynx, are certainly forced to the conclusion that it is paralysis of the inferior recurrent laryngeal "nerves," which control the "crico arytenodei prostici;" these muscles having attachments to the arytenoid cartilages, and being also the true openers or dilators of the glottis.

It has been accurately demonstrated by Dr. J. Reid (although for another purpose), and will serve for illustration: "If the inferior laryngeal branches be divided, or the trunk of the pneumogastric be cut above its origin, there is no constriction of the glottis, but a paralyzed condition of the muscles, respiration being performed at ease so long as the animal remains at rest, but any unusual respiratory movement, such as takes place at the commencement of a 'struggle,' induces immediate symptoms of suffocation; the current of air carrying inward the arytenoid cartilages, which are rendered passive by a paralyzed condition of their muscles," and there falling upon the opening of the glottis-like valves, prevent thereby the normal interchange of gases.

There can, then, be no doubt that the laryngeal branches of nerves constitute the circle of incident and motor nerves of the larynx, governing, therefore, the aperture of the glottis. Therefore, any irritation or plastic inflammation, being the result of powerful and specific blood changes, and having its selection of self-elimination, causing thereby a fibrinous exudative deposit upon the epithelium of the laryngeal structure, may, and not unfrequently does, produce "morbid action" of the peripheral "nerve fibers" of the extremities of the laryngeal branches of nerves, developing thereby pseudo-membranous croup, and not unfrequently ending in complete paralysis of the nervo-muscular structure of the larynx, therefore leading to a fatal issue, instead of the augumented, organized false membrane, as is but too frequently supposed. The false membrane in pseudo-membranous croup, by repeated examination microscopically, seems to consist of amorphous or finely fibrillated fibrin, in which almost numberless young cells have been entangled during the process of its formation.

In view of the true pathology of pseudo-membranous croup, we arrive at the following conclusion :

That any medicinal agent which has a tendency to depress the "vital powers" of the system, by deteriorating the blood, is highly contraindicated.

Emetics, clinical experience affirms, are generally of doubtful efficacy. It is to be remembered that it is rarely that the glottis is occluded by the copious effusion of the exudative lymph. Indeed, experience affirms, that the greater part of the false membrane remains attached to the surface of the epithelium until death or convalescence is established.

If, however, there are detachments of false membrane within the air-passages, cupri sulphas may be given in one or two large doses until emesis is produced ; but it should not be forgotten that all emetic substances should be prescribed with great circumspection.

We have witnessed the most brilliant results from the alkaloid quinia in this exceedingly grave disease. We seldom give it as a tonic, but in one, two, or more large doses—from five to ten grains to children from five to ten years of age, given every one, two, three, or five hours, according to circumstances or indications to be met, combined with syr. aurantii and spts., lavandulæ comp., acidulated with aro. sulph. acid ; these being suitable adjuvants for administration of quinia to children.

May not quinia act in curing this disease, by neutralizing the morbid principle in the blood or supplying one or more of the wanting elements to the blood, thereby preventing the blood changes? Indeed, it is fact well established by chemical research (and one of the most remarkable of the age) that there is a principle in health analogous to quinia.

To illustrate more fully the beneficial action of quinia in this disease, I will subjoin the following case: Called in consultation with Dr. Holmes, of Lynchburg, of this county (Highland), to see a little daughter of Capt H. C. Dawson, who had all the symptoms of pseudo-membranous croup; pulse 147 beats to the minute—quick, small, easily compressible; voice could not be raised above a whisper; efforts to cough, as it were, muffled—persistent, perilous; dyspnœa (which is always characteristic of this disease); pallid surface; agitation, with great anxiety, etc.

Quinia was given freely in the above case, together with beef-essence, sweet milk, and coffee *ad libitum.*

Notwithstanding croupous pneumonia supervened, which called for alcoholic stimulants, with some auxiliary measures which are generally demanded in this complication of pseudo-membranous croup, our little patient made slow but permanent recovery.

If the bowels should be constipated, a mild cathartic would be indicated; frequent sponging with tepid vinegar, immediately followed by friction with warmed flannel, is highly indicated in promoting healthy action of the "cutaneous capillaries." A full generous diet should be allowed, and the hygienic laws strictly, enforced during the whole progress of this disease.

Art. III.—Case of Deafness of Twenty Years' Standing.

Treated successfully, with the Eustachian Catheter, by Dr. A. M. WHITEHEAD, of Springfield, Ohio.

The patient was a man, aged forty-one years, who was recommended to me by Dr. Caspar, of this city, September 2, 1872. The hearing of the left ear had been impaired twenty years; that of the right ear had been impaired about six weeks. Upon testing the hearing with a watch, he was unable to hear it unless pressed upon the auricles. Upon examining the membrana tympana of the left ear, it was found to be abnormally concave, and less translucent than normal. The membrane of the right ear showed acute inflammation. The patient was unable to force air through the Eustachian tubes by the Valcabrian method. After introducing the catheter, and forcing air into the cavity of the tympanum, the hearing distance of the left ear was increased six inches; of the right ear about three inches. After three treatments with the catheter, at intervals of three days, the hearing was improved so much that the patient concluded it was good enough, and left this city for the west. I have since heard from him, and the improvement has been permanent. I suppose the impairment of hearing in the left ear was caused by a long-continued closure of the Eustachian tube, as it was relieved at once by the use of the catheter. The only constitutional treatment employed was cathartics.

QUADRUPLE AMPUTATION.—In the autumn of 1869, Dr. Begg, of Dundee, amputated the whole of the extremities in the case of a young woman named Robertson, whose hands and feet had assumed a gangrenous condition, the proximate cause of which was considered to be embolism. After the operation, a subscription was raised, and the poor woman sent to London, where, at the request of some influential friends of hers, Mr. Heather Bigg constructed for her some especially devised prothetic appliances, in which the distinguishing features were, that the artificial hands were automatic in action, opening and shutting their fingers at the will of the patient. This peculiar prehensility gave her the power of grasping even so small a substance as a crochet-needle, and enabled her to gain a comparatively lucrative livelihood by making shawls, etc. So admirably did she do this, that one was sent by her to the Queen, who, struck by the excellence of the workmanship and the remarkable means by which it was accomplished, generously gave the poor woman £5. The artificial legs were also so arranged as to enable her to stand and walk with the aid of crutches. Three years have passed since she first began the use of extraneous appliances, and she now writes an admirable hand, besides knitting, feeding and dressing herself, etc. "In a communication made by her a few days since, which is now before us," says the *British Medical Journal*, "she writes that she can walk alone quite easily with the aid of crutches, and that no one can observe the cause of her lameness. The case is one of no common interest, owing to its being the only one on record in which the whole of the four extremities have been removed. Apart from its pathological value, as indicating how life may be saved by judicious interference in cases of embolic gangrene, there remains the gratifying result that, by the use of ingenious mechanism, the patient is enabled to gain her living, whilst presenting nearly the same external appearance as if she still retained possession of her natural limbs. It is a unique case, and a triumphant instance of mechanical ingenuity."—*Medical Times.*

Translations.

Memoir upon Cysts of the Jaw.

By Dr. E. MAGITOT, *Laureat de la Faculte, de l'Academie de Medicine, etc.* Translated from the *Archives Generales de Medicine,* by THOMAS C. MINOR, M. D.

The present monograph has for its object the study of those cysts which arise in the substance of the maxillary bones. The principal things which we intend to treat of are; the determining of the nature of these cysts; the indication of the place it is necessary to assign them in the nosological scale, and the exact mechanism of the production of the lesion. The collection of our researches is founded upon the critical and analytical examination of cases gathered before us in this order of studies, and upon the investigations of our own personal observations. We shall treat only, in concluding, of the symptomatology, progress, and treatment of cysts of the maxillæ, these points having already been carefully studied and clearly elucidated by other authors. The particular purpose we shall pursue in this study is to establish the fact that all cysts of the jaw constantly and exclusively recognize for an origin a particular condition of the dental system. It is this problem, already foreseen by various authors in some of its particulars, that we hope in this short essay to solve in such a way as to free it from pathogenic theory, and formulate it in a precise manner.

I. *History of Cysts of the Jaw; Criticism of Cases.*—The ancients did not recognize cysts of the jaw, for they confounded them in the general class of tumors.

We come down to the middle of the seventeenth century, with Scultet,* to find the first expression of *chyste*, and the finding of a closed cavity containing a material "*jaune comme du miel*" (yellow as honey). The author neither suspected its nature nor its mode of production. He remarks, however, in one of his observations, that in order to cure them, it is necessary to remove the small hard masses from the neighborhood of the pouch. It appears probable to us that these masses were dental debris.

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*Armentarium Chirurgicum. Hague, 1654.

A century later, Runge* published cases still more complete, in which the relation between the alterations of the teeth and the appearance of the tumor is clearly established. The author, however, gives no explanation, and confines himself to mentioning these circumstances. In one of his cases, the cyst was opened by the alveola, two teeth being extracted, thus treated and cured in this way.

Some years later, we find observations of cysts of the jaw published by Bordenare,† Morelot,‡ and Jourdain.‖ The first of these authors very clearly relates that, in a voluminous cyst occupying the inferior maxilla, he came across the roots of a molar tooth, denuded, and entering the pouch, and that on extracting this tooth the liquid escaped through the socket. The observation of Morelot is much more interesting and more complete, for the tumor, dissected at the autopsy of the patient, permitted him to find, to the great surprise of his assistants, a tooth implanted in the wall of the cyst. This is, we believe, the first example of a *fallicular* cyst.

The cases of Jourdain relate to cysts of the superior maxilla, manifestly foreign to the sinus, although this preoccupation may be constant on the part of the author to whom we owe, as it is well known, those very curious studies and very remarkable observations regarding the maxillary sinus and its diseases. In two cases of Jourdain's, notwithstanding the therapeutical attack internally and externally which they underwent, as soon as the teeth, which were greatly altered, were extracted, a rapid cure took place, assisted in the meanwhile by dressings and injections used in the alveola. However, another observation of Jourdain's, that we may, with the two last, connect to cysts of the jaws, is relative to a pouch which was opened through the alveola, at the center of which was met a tooth adherent to the wall. It seems to me that this was still another follicular cyst.

Whatever it may be, and, though in these different relations we might already recognize several types of cysts of the jaws, no mention of the proximate or remote cause, no suspicion of its mode of production, is betrayed on the part of authors. It is necessary to come down to the commencement of this century, in order to find the first manifestation of this kind. It is Delpech,* who, having noticed that certain teeth had about them, when being extracted, membranous filaments adherent to their roots, and at times small closed pouches, advanced the hypothesis that cysts of the jaws develop themselves *in the dental pulp or in its vasculo-nervous cord.* Although this explanation may be, as we see, a little confused, it is evident that Delpech was upon the track of one of the origins of these cysts. The presence of membranous filaments adherent to an extracted tooth establishes very clearly from thence the existence of certain distinct pouches; but, as these cases were almost all met in the superior maxilla, they have invariably been connected to those affections designated by the name of deposits, abscesses, or hydropsies of the maxillary sinus. In the meantime a certain number of observers, among whom we may cite Hunter, Brodie, Callisen, Cooper, and Siebold, had already sought to establish that, in bone in general, and consequently in the jaw, there may be developed spontaneously pouches filled with liquid, and distinct from natural cavities.

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*Theses de Haller. Lausanne, 1775.

†Memoirs de l'Acad. Royale de Chirurgie, 1774.

‡Memoirs de l'Acad. Royale de Chirurgie, 1778.

‖Maladies de la bouche, 1778. I, p. 125.

After Delpech, Dubois† and Marjolin‡ described two examples of cysts developed outside the aveolar borders—one in the orbital border, the other in the palatine arch, and each one contained a healthy tooth. These were certainly two cases of *follicular heterotopia.* It appeared a very strange thing to these observers; but they did not attempt, however, to elucidate its mode of development.

We come, finally, to Dupuytren, with whom the question of cysts of the jaw takes a new physiognomy.‖ This affection enters definitely into the nosological scale. Dupuytren describes its progress. He lays down its diagnosis, and it is to him that is attributed, wrongly however, as we shall see, that particular sign of fluctuation called *bruit de parchemin.* Regarding treatment, Dupuytren was nevertheless the first who dreamt of curing voluminous cysts of the jaws otherwise than by resection of the bone, almost the only operation employed before him. One operation attempted in this sense had in the meanwhile resulted fatally.

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*Chirurgie clinique, 1816. t. III, p. 439.

†See Boyer, Maladies chirurgicales, 1818.

‡Cited by Duchaussoy, thesis, 1857, p. 32.

‖Lecons orales, 1839. 2d ed., t. II, p. 129.

This was the case of a small girl aged seven years, who, after a violent contusion, was attacked by a considerable swelling of the superior maxilla. Dupuytren, after having diagnosed, at his clinic, a cyst of the jaw, opened it through the mouth. A mass of blackish blood was expelled. Consecutive inflammatory symptoms carried off the patient, and the autopsy showed that in the maxilla there were multiple cavities filled with a fibrinous material, and with *a soft substance easily broken up.* No investigation was made regarding the nature of these masses, nor was any suspicion evinced regarding the possible participation of the follicles of second dentition at that time contained in the jaw, and which must, after the traumatism experienced, have become the seat of multiple effusions. Perhaps a commencing disorganization alone might have caused the tumefaction existing, designated wrongly, in our opinion, under the name of cyst.

So then we see, if the question of diagnosis and treatment occupied Dupuytren, it was not the same regarding the pathogeny which was not suspected, as the professor of the "*Hotel Dieu*" exclusively looked at the trouble from a purely clinical and surgical point of view.

Other observations of cysts of the jaw that we come across in the works of Dupuytren relate to cases of cures made by directly opening the sac, and afterward dressing it. In one of them the eminent surgeon noticed that the commencement of the tumor coincided with fruitless attempts at extraction. Is it not thus plain to see the frequent beginning of a cyst of the periosteum? In another case, the cyst occupied the point of the inferior maxilla corresponding with the wisdom tooth, which had not yet appeared. The cyst having been opened, there was found a fibrocellular mass on which ablation was performed, but it was not examined. Is it not still allowable to admit that it arose here from a cyst dependent on the wisdom tooth remaining in a follicular state? Whatever it may have been, the attention of Dupuytren being attracted toward this question of cysts of the jaw, a physician of Paris, Dr. Loir,* presented at the same time, at the clinic of the "*Hotel Dieu*," a cyst of the superior maxilla, in which dental intervention was not doubtful. It contained, following the expression of Dupuytren, *a reversed canine tooth*, and occupied the palatine apophyses. This was evidently a case of heterotopical follicular cyst. Some years later, Lombard,* Blasius,† and Syme‡ published observations of cysts of the superior maxilla, developed heterotopically in the sub-orbital fossa, or projecting into the sinus, in which their relation with the teeth was clearly determined, and the latter were considered as proximate causes of the lesion.

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*Clinique de Dupuytren.

In 1840, Forget,‖ in his inaugural thesis, published, regarding cysts of the jaw, considerations that he retracted some years later.§ The following were some of his ideas: Among cysts of the maxillary bones there are a certain number which have, not only for a cause, but also for a seat, the alveola of the teeth, and he gave them the name of *alveolo-dental cysts.* This was the first time that the relation of these cysts with the dental system was formulated in a clear manner. However, this term of alveolo-dental cysts still fails in sufficient precision, and its pathogeny is not clearly established. Besides, the term *alveolo-dental* was only suitable for cysts in adult age, and from thence the explanation could only be addressed to those which developed themselves in infancy, during the period of evolution of the follicles. It is to M. Guibout¶ that we must concede the credit of having first advanced the hypothesis that a cyst of the jaw might arise in the dental follicle itself. After advancing this proposition, M. Guibout, understanding well that all cysts could not definitely enter into this special category, advanced the two other explanations which follow. A cyst may be "*the result of a vice in dental evolution,*" hypothesis which confounds itself with the first; it may also be "*the consequence of the vital activity that nature displays at the center of the maxillary bones and from vicissitudes of form, of structure, and of dimensions, which these bones undergo.*"

Let it be as it may, from this last hypothesis, somewhat slightly *vitalistic*, the follicular cyst was finally suspected, and it was in the observation of one of these cysts, found in a woman of fifty years, that M. Guibout demonstrated his theory. The tumor, it is true, dated more than twenty years back, and from its commencement up to the moment it was observed, the wisdom tooth had not appeared. It was to its follicle, attacked by an arrest of evolution and trouble of nutrition, that M. Guibout very judiciously attributed the appearance of the cyst.

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*Theses de Montpellier, 1836.

†Arch. de Medicine, 1840.

‡Zeitsch fur chir. und klin., von Aug. Blasius. Halle, 1835.

‖Theses de Paris, 1840, No. 156.

§Mem. de la Soc. Chir., 1853.

¶Union Medicale, 1847.

Aside from these two authors, Forget and Guibout, whose names will always stand recorded in connection with the history of cysts of the jaw, representing, as they do, the two initial hypotheses of the pathogeny of these alterations, the observations succeeding were clearer, more complete, and for the most part more susceptible, from their details, to be connected to one or the other species of cysts that we are endeavoring to establish.

Thus we find in the observations of Baum,[*] Nelaton,[†] Barue,[‡] Maisonneuve,[||] Legruest,[§] Giraldes,[¶] B. Cooper,[**] Wormald,[††] and Salter,[‡‡] cases in which its dental relation is not put in doubt, and which, without bearing a precise designation, appear to us to manifestly connect themselves to the variety of cysts of the dental follicle. Salter describes, in a special chapter, *dentigerous cysts*, which he attributes to abnormally placed teeth, supplementary or not. J. Paget[||||] likewise describes them, and the term *dentigerous cysts* has been since then adopted in England by authors occupied with the subject. We shall cite, for example, the cases reported by Tomes[§§] and Coleman.[¶¶]

Other English and American surgeons, Erichsen[***] and Gross,[†††] for example, point out likewise, among the cysts in bone, their very frequent presence in the maxilla, but without publishing any cases.

One of the observations among those that we come to cite, that of M. Legruest, is entitled *alveolo-dental cyst*, conforming with the denomination adopted since M. Forget. The cyst contained two teeth, and the details of the case are of so plain a nature as to permit us to be assured that it arose from a cyst of the follicle, or of both follicles fused, of the teeth designated.

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[*] Cited by Paget, 1853.

[†] Bull. de la Soc. Anat., 1856.

[‡] Cited by Duchaussoy, loc. cit.

[||] Clinique Chirurgicale, 1863.

[§] Bull. de la Soc. Chir., 1863.

[¶] Lecon Cliniques, etc., 1869.

[**] Cited by Holmes.

[††] In Lancet, 1850, t. I, p. 756.

[‡‡] Holmes' Syst. of Surg., 1870.

[||||] Loc. cit., p. 90.

[§§] Trans. Odont. Soc., 1863.

[¶¶] Trans. Odont. Soc., 1865.

[***] Science and Art of Surgery. London, 1853, p. 677.

[†††] System of Surgery. Philadelphia, 1864, vol. II, p. 432.

On the other hand, the observations of Dolbeau,* Chassaignac,† Vitalis,‡ Gosselin,|| and Letenneur§ are manifestly connected, after the examination to which we have given them, to the variety of periosteal cysts; the majority of these cysts being consecutive, either to dental alterations recognized in the subjects, or to fruitless attempts at extraction. It is well, then, to establish this, as the ordinary process of cysts having their origin under the dental periosteum. Another case of the same sort, cited by M. Houel,¶ is a specimen in Dupuytren's museum. It is a cyst of the inferior maxilla developed on the median line. The pouch opened shows the roots of two incisor teeth dipping into the cavity and deprived of their periosteum. No doubt they may have served in forming the cystic wall itself. Unfortunately, no observation accompanies this interesting specimen. About the same time I also published an observation of a cyst of the dental periosteum.** It arose from a small sac which had been brought about at the summit of a root during the extraction of the latter. The cyst was the size of a large pea; it was not destroyed, and its viscid and purulent contents contained a considerable quantity of cholesterine. This fact was assuredly not new. Similar cases had already been presented by other authors, Bordenave,†† Fauchard,‡‡ and Delpech,|||| for example. Its size was very small, but these are in the meanwhile the same cysts which, under other influences, may take on a development which gives them the size of an egg, of a fist, or at the same time even of a child's head.

Coming, finally, to the present time, we will bring to the support of our theory, in addition to our personal observations, three

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*Bulletin de la Soc. Anatomique, 1858.

†Bulletin de la Soc. de Chirurgie, 1859, Mars 16.

‡Bulletin de la Soc. Anatomique, 1858, 2d series.

||Gazette de Hopitaux, 1855, p. 529, et seq.

§Bulletin de la Soc. Chirurgie, 1862, 21 Aout.

¶Bulletin de la Soc. Anatomique, 1847, t. XXII.

**Memoir sur les tumeurs du perioste dentaire, 1860.

††Loc. cit., p. 329.

‡‡Le Chirurgien Dentiste, t. I, p. 426.

||||Loc. cit., p. 442.

cases altogether demonstrative. One of them is relative to an anatomical specimen in M. Fuzier's collection. It is a cyst which invaded, distended, and almost entirely hollowed out the whole superior apophysis of the right inferior maxilla, in a man aged twenty-five years. The subject who suffered from this tumor having died of yellow fever in the Vera Cruz hospital, M. Fuzier, in making his autopsy, found this specimen, which he was kind enough to place at my disposal. The wisdom tooth was certainly the cause of this cyst. It lays inclosed at the base of the coronoid apophysis, and it seems clearly evidenced, notwithstanding the dry condition of the specimen, that the cyst had for its origin the follicle of this same tooth. The second case was observed by Prof. Verneuil, at the hospital Lariboisiere.* It is one of the most complete and most demonstrative. The patient was a man aged twenty-nine, who suffered for more than a year from a hard, indolent tumor, the size of a small orange, situated at the right side of the inferior maxilla. M. Verneuil having been so kind as to invite me to see this patient, I agreed with this eminent surgeon in a diagnosis of the lesion, as being *a cyst of the dental periosteum.* The sac was opened, and the finger introduced into the cavity, met a denuded root dipping down into the cyst. Besides, this latter having been extracted, a communication was recognized between the alveola and the cavity of the tumor. This was so evident that a wire was passed from one into the other, in order to be knotted on the alveolar border. The demonstration of the periosteal nature of this cyst was completed by the examination of the root itself, which we found free, furrowed, and deprived, that is all the portion bathed in the liquid, of its periosteum, which most evidently formed the wall of the cyst.

A third observation, that we owe to the kindness of our friend, Dr. J. Moreau, is not less complete nor less demonstrative than the preceding. This was the case of a young man aged twenty-five years, who suffered from a periosteal cyst in the superior maxilla. The sac opened, permitted the recognition of the presence of the root of a tooth dipping down into the liquid, and denuded of its periosteum. A cure was obtained, however, in this case, without extracting the tooth.

Finally, my personal observations, of which some already date back several years, are in number seven, which, added to the case

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*Voy. A. Barbat. Theses de Paris, 1872, p. 46.

I published in 1860, constitute a total of eight examples of maxillary cysts. Three of them were in nature *follicular* and at different degrees of its evolutions; the other five were of the *periosteal* kind. These are those cases which, joined to the analysis and criticism of the relations which are met in the science, constitute the elements of demonstration and the proofs in support of my theory. My prejudice in regard to this question of cysts of the jaw is besides not recent, and already, some years since,* I had, in a short magazine article, sought to establish my opinions in regard to this subject.

I shall try to develop it to-day, and I have the firm conviction that henceforward all cysts which are met in the maxillæ, and which shall be observed in a spirit deprived of all prejudice, will inevitably enter into one of the species whose anatomo-pathological conditions and mode of development I intend to show.

II. *Definition of Cysts of the Jaw; their Nature, their Classification.*—We must give the name of *maxillary cysts* to all membranous pouches, closed in all parts, pathologically developed in the maxillary substance, distinct from the ambiant tissues and containing principally a liquid of variable density, with or without solid accessory parts.

By this definition, which is only an application of the general definition of cysts to particular cases to which it is applied, we intend to eliminate immediately all encysted tumors of the jaw, as *dental exostosis*, fibrous tumors, etc., for reason that the various productions of the same order which, originally developed at a point adjoining the maxilla, might consecutively invade the tissues of the latter. Such are, for instance, the cysts of the maxillary sinus, which could not be by any means included among cysts of the jaw. The sinus, in fact, should be considered as a dependence of the nasal fossæ; its communication with the latter, by the orifice of the middle turbinated; the nature of the membrane lining it; the composition of the mucus and the structure of the glands secreting it, are sufficient proofs of it. There are at the same time glands which become the seat of special cysts of this cavity, the *mucus cysts*, described by M. Giraldes.

The same remark still applies to certain cysts of the buccal mucous membrane, situated either at the vault or velum of the palate or at the roof of the mouth, cysts ordinarily formed at the expense of the salivary gland, and capable, by their ulterior development, of pushing into and lodging in or invading one or the other maxilla. Certain productions situated under the periosteum of the maxillæ, and designated wrongly by the name of cysts, should still remain absent from our description.* These are simple effusions of inflammatory nature consecutive to particular lesions of the teeth or of the alveolar borders. We may finally mention, in this connection, the hypothesis of the seat of certain cysts of the jaw in the dental canal and its vessels. We shall see further on, that this assertion rests on no case observed, and that it must be absolutely repelled. The cysts of the maxillæ, considered from the point of looking at their nature, should belong to a single class of lesions—the alterations of teeth in the follicular state or in the adult state. We formulate this proposition thus:

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*Essay upon the pathogeny of cysts and abscesses of the jaw. Gazette des hopitaux, 1869, p. 245, et seq.

All spontaneous cysts of the maxillæ are of a nature essentially and exclusively dental.

This assertion will appear, without doubt, very absolute at first sight; but, if we look without prejudice at the series of cases collected up to the present day, we are struck from the first by this circumstance, that the greatest number of observers mention an evident relation with the dental system. Many of them even establish, in a precise manner, the casual circumstances with the various conditions of the teeth, and if a certain number of cases should be overlooked from this point of view, it is because they fail in the precision and rigor which should belong to an authentic observation. These latter must not, consequently, be taken into serious consideration.

The theory of the dental origin of certain cysts of the jaw is not, besides, wholly new. Without here recalling the cases already mentioned by Delpech, Marjolin, Forget, Guibout, Dolbeau, etc., M. Broca, among modern authors,† affirms that the very greatest majority of these cysts are due to a trouble of evolution in the *dental follicle*, and he adds that any other species of cysts, *progenic* cysts for example, are not met in the jaws. This affirmation, we see, however, is not exact, and we shall describe true *progenic* cysts likewise of dental origin—the *alveolo-dental cysts of the periosteum.* A different opinion, however, is given in a remarkable work which will appear at the same moment this article goes to the press. It is the article "*Pathology of the Maxillary Bones,*" by M. F. Guyon (Dictionn. encycloped. des sciences medicales, 2d series, t. V, p. 414). The author divides cysts of the jaw into *dental cysts* and *non-dental cysts.* Among the first are easily found cysts of the follicle and those of the periosteum. Among the second are described cysts of the sinus and certain multilocular cysts of an undetermined nature. We shall discuss further on, *apropos* to its *pathogeny*, the opinions enunciated in this article, by seeking to establish that a multilocular cyst is likewise explained by the same origin and after a particular process.

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*Such are the cases reported by Ancelet, Souvier Jacquin, and Meilhac. Gazette des hopitaux, 1859, p. 119, et seq.

†Traite des tumeurs, 1869, t. II, p. 35.

We hope, then, to convince the reader of the exactness of this doctrine, that *cysts of the jaw have for their origin some derangement of the dental system.* The only exception to this rule is that of *perigenic cysts*, developed around a foreign body. We are under obligations to M. Maisonneuve for an observation of this sort.* It is necessary, besides, to consider that the jaws are, truly speaking, only simple supports intended to contain the teeth, and that the latter, which are the fundamental organs of this region, are on their part, from a physiological point of view, the centre of phenomena of evolution which occupy the greater part of life, and besides, may become pathologically the seat of numerous and various alterations, which immediately affect the tissues of the jaw. In fact, in infancy, the dental evolution commencing during intra-uterine life, provokes and brings about a considerable functional activity in these tissues. These phenomena are prolonged up to an adult age by the coming out of the last teeth. They correspond to the intra-follicular development of the organ, a development whose accidental operations give rise to the numerous and varied series of dental anomalies. Among these anomalies, there are several we must invoke in the pathogeny of one of the two sorts of cysts, the *follicular cysts.* These are anomalies of nutrition, situation, and of the epoch of development. Follicular cysts may, then, be considered as recognizing a cause purely teratological, a circumstance which connects them sometimes, from the point of looking at their nature and their anatomo-pathological surroundings, with a group of alterations of a neighboring order, which were so remarkably studied by Broca—*odontoid tumors.* We shall see at the same time that certain lesions of the maxillæ are in some way intermediate to the two nosological species and participate at the same time as cysts and odontoid tumors. Several cases met in the science are of this sort.

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*Clinique chirurgicale, 1863, t. I, p. 594.

When the phenomena of follicular evolutions are accomplished, of which the termination is represented by its *eruption*, the tooth has arrived at its adult state, and the only alterations that it can undergo are of a pathological nature; traumatisms, organic lesions, caries, various affections of the periosteum, etc.; troubles among which are arranged the second class of cysts—*cysts of the dental periosteum.*

Outside of these two sorts, cysts of the dental follicle and cysts of the periosteum, we believe that there exists no other mode of origin, except perigenic cysts. The pretended hydatid cysts rest on no authentic case, notwithstanding some claims in this regard, which fail completely in proofs.*

After these considerations, it is easy to foresee what will be my classification of cysts of the jaw.

A.—In a first variety, we shall describe the *progenic* or preexisting *cysts of the dental follicle.* They shall be divided, for the purpose of seeing their pathogeny, into:

1. *Cysts of the embryoplastic period*, that is to say, coming on during the follicular period, anterior to the genesis of the ivory and enamel.

2. *Cysts of the odontoplastic period*, answering to the epoch when the first rudiments of the crown appear in the substance of the follicle.

3. *Cysts of the coronary period*, that is to say, those which have arisen in the follicle at the moment it has perfected its dental crown.

The cyst will be simple if it is developed in a follicle occupying its normal seat; heterotopical if this follicle has undergone displacement, an anomaly of situation, and if it should be or not be supernumerary.

The cysts of this first category should still be distinguished according to their contents, of which we shall finally make mention, that is to say, into *serous*, *meliceris*, and *caseous cysts.*

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*M. Davaine, in his remarkable "*Traite des entozoaires,*" cites an example of hydatids of the jaw.

B.—In a second variety, we shall describe *neogenic* cysts of the jaw, that is to say, those which are formed outside of a pre-existing cavity. These cysts are those which are produced below the dental periosteum, raising up from the surface of the tooth, to which it normally adheres. The wall of the cyst is formed by the periosteum itself, which, from thence detached, undergoes besides a distension, with hypergenesis of its elements, in a way to form the total extent of the cystic sac. These cysts should be called *subperiosteal* or *periosteal.* I prefer the latter term.

I shall make, besides, another remark, which shall be further developed: it is that, from a purely pathogenic point of view, cysts of the follicle and those of the periosteum have definitely for a sac only a single and same membrane, the walls which inclose the follicle during the embryonic or infantile period becoming, owing to the progress of the evolution, the alveolo-dental periosteum, which, at the moment of its eruption, presents and fixes itself at the radicular surface of the tooth.

The cysts of this second variety, owing to their contents, into *serous cysts*, *meliceric cysts*, and *purulent cysts.*

C.—A third variety of cysts of the jaw is represented by *perigenic* cysts, that is to say, those which have for a center of evolution a foreign body, a ball for example. These are, properly speaking, foreign bodies in the jaws becoming encysted.

I give, in conclusion, a table, in which cysts of the jaw are separated and classified:

TABLE OF CYSTS OF THE JAW.

1*st Variety.*—Progenic; follicular cysts....................	Simple or Heterotopical.	Embryoplastic period.	Serous. Meliceric. Butyric.
		Odontoplastic period.	Serous. Meliceric.
		Coronary period.	Serous. Meliceric.
2*d Variety.*—Neogenic; periosteal cysts containing (with or without cholesterine).............			Serous. Meliceric. Purulent.
3*d Variety.*—Perigenic; encysted foreign bodies (case of Maisonneuve's).			

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE.

JAS. GRAHAM, M. D., PRES'T. J. W. HADLOCK, M. D., SEC'Y.

CONGENITAL MALFORMATION OF TERMINAL PORTION OF INTESTINE.

Reported by L. A. QUERNER, M. D., of Cincinnati.

Bodenheimer well remarks that, from the remotest antiquity, the congenital closure of the anus or rectum was noticed by the Greek, Roman, and Arabic physicians. They, however, looked upon it generally as beyond the power of art to remedy, and consequently as possessing no interest, beyond being a "lusus naturæ."

It is rarely that we meet with a case of malformation that proves so fatal to the life of the infant, and so distressing to the parents. When they are made aware of the operation necessary to be performed, and the result expected to be accomplished, they often prefer the death of their offspring, and positively refuse to submit to an operation, as in the following case:

A. B., born November 16, 1872. To all appearances it was a healthy child. Thirty-two hours after birth, I found that the child had neither taken the breast, nor had had an evacuation from its bowels. It was fretful and slept but little. I examined the mouth and anus, and found them normal. I directed the child to be put to the breast, and if its bowels should not move within four hours to give it a dose of castor oil.

The next day I was informed that the babe had not nursed, and that the oil had not operated; but that soon after it had been taken it was vomited, mixed with fæcal matter, of an ochre color. Urine had been secreted. The countenance indicated suffering. The abdomen was swollen and tympanitic, with a slight prominence in the left hypochondriac region. On making a digital examination, the finger was arrested at the depth of half an inch from the anus. A female catheter was then used, and introduced with some force to the depth of three and a half inches, and on its being removed was followed by meconium. By the most careful examination, I could not detect any dependent portion of intestine.

I then explained the difficulty to the family, and advised an operation. They refused, preferring the death of the child to so loathsome a result. My next visit found the little sufferer worse, vomiting all the food administered, mixed with fæcal matter. There was an increased distension of the abdomen; slight pressure gave great pain, and caused the child to cry violently. The legs were flexed on the abdomen. The efforts at dilatation with catheters were continued each day without effect. The patient continued to grow worse, and died eight days and twenty-one hours after birth.

Post Mortem, nine hours after death.—Slight emaciation; abdomen greatly swollen and tympanitic; the enlargement in the left hypochondriac region was not as prominent as during life, owing probably to the greater distension of the abdomen. On section, the intestines were found to be slightly congested, and filled with fæcal matter and gas. The small intestines were normal, and entered the cæcum on the right or external aspect. The ascending colon was also normal. The transverse colon measured three and a half inches in length, terminating in a floating blind pouch in the left hypochondriac region. On examining the left lumbar region for the descending colon, I found a fibrous cord attached to the posterior and lateral wall of the peritoneum, which extended down into the pelvic cavity and took the course of the descending colon, sigmoid flexure, and rectum, terminating at the anus. The anus was perfect and rectum normal, to the depth of three-quarters of an inch, when suddenly it contracted into the cord mentioned above, which was found to be ten and a half inches in length, and had no connection whatever with the terminal portion of transverse colon.

Etiology.—Nothing definite has as yet been ascertained in regard to the primary cause of congenital malformations. The science of embryology is not sufficiently advanced as yet, to give any satisfactory explanation of these freaks of nature. It teaches, however, that at any period during the evolution of the embryo or fœtus, the action of the formative energies in any part of the organization may be so affected, or so influenced, as to become either partially or wholly suspended, or augmented, and result in the production of imperfect or anomalous organs, or in an entire want or non-production of them.

Bodenheimer asks, but does not answer the question, whether the result of the power acting upon the fœtus in utero, through the imagination or feeling of the mother, might not be the cause of malformations.

I think that a germ once formed by the combined action of the two sexes can not be remodeled by the separate action of one. A sudden fright, or disease, by interrupting nutrition, may destroy the embryo, but I do not think that either can produce those abnormal deficiencies and excesses of development, which are occasionally met with. I believe it an impossibility for a mother to convey a fancy, or a fright, from her mind to her uterus through an insensible placenta, and through a long insensible navel cord, through the umbilicus, and thence to some distant part of the body of a fœtus, so as to give rise to disease, and such disease ultimate in the malformation of any organ. MM. Serres, Geoffrey Saint-Hilaire, and Boux de Brignolis concur in the opinion that the congenital malformation of the anus and rectum depend upon a deviation, an imperfection, or an absence of the hemorrhoidal arteries. If the artery is only partially developed, the part to which it is distributed remains in a state of atrophy; if it is totally wanting, the organ does not exist at all. Tiedeman, believing that the nervous system is developed before any other part of the body, is of the opinion that congenital malformations or anomalies depend upon the imperfection or the want of certain portions of the nervous system. The evidence, no doubt, is in favor of the arterial system.

The cause of the deviation, the imperfection or the absence of these arteries and these nerves, will remain a problem for future organographists to solve. There are some of the congenital malformations of the anus and rectum which depend upon neither an arrest of, nor an excess of development, but are the result of disease in intra-uterine life. Rectitis during fœtal life may cause the obliteration of the anal aperture or rectum for a greater or less distance above the anus. Peritonitis may also occur, giving rise to adhesions between the intestines, and thus cause malformation.

As I can not enter minutely into the etiology of this subject, I will not detain the reader, but leave him, if interested, to consult the authors that have made it a special study.

Various plans of treatment, by means of operations, for the relief of the above forms of malformation have been devised. As prominent among these, may be mentioned the operation by puncture. It can only be performed in those cases where the septum intervening is very thin and a fluctuating tumor can be detected distinctly.

Even then it would be advisable to use an exploring needle before the introduction of the bistoury or trocar.

By the use of this precaution we would avoid the accidents that happened to Drs. Johnson, Jenner, and Von Ammon. The former passed his trocar into a fluctuating tumor, which proved to be the distended peritoneum. The instrument passed through the vagina, back of the uterus, into the recto-uterine pouch. And the two latter had the same misfortune.

The second operation is termed by Dr. Benj. Bell the explorative operation. It consists in cutting through the perinaeum in the median line close to coccyx and sacrum, using the finger of the left hand as your guide, and searching for the lost intestine. If the dependent portion is detected, an exploring needle would again be advisable. Should meconium follow, then perforate and bring down the intestine and attach it to the margin of the anus.

The third and fourth operations consist in forming an artificial abdominal anus. These operations are strongly opposed by various writers, among whom may be mentioned Prof. Bigelow, of Boston, and Prof. Gross, of Philadelphia. The latter says: "We are struck with astonishment that any one possessed of the proper feelings of humanity should seriously advocate a procedure so fraught with danger and followed, if successful, by such disgusting consequences." As it is the duty of the physician and surgeon to preserve and to prolong human life, it is clearly his duty to propose to the parents of the child the establishment of an artificial anus in the abdomen, providing he has entirely abandoned all hope of forming an artificial perineal anus. Well does Mr. Amussat say, that an artificial anus in the lumbar region is no doubt a great infirmity, but it is life or death, and a great many would prefer an artificial anus to death.

The position chosen for an artificial anus is either that of Littre or Amussat. Littre's operation consists in an incision in the left iliac region of from one and a half to two inches in length, between the antero-superior spinous process of the ilium and pubis, a little above and almost parallel to Poupart's ligament, dividing the skin, superfical fascia, the aponeurosis of oblique externus and lower fibers of the obliquus internus, fascia transversalis, and then carefully approaching the peritonaeum, exposing it carefully, opening and bringing out the intestines, securing the same, then opening and attaching it to the margin of the fascia, care being taken not to allow any of the gas or fœces to enter the peritoneal cavity. A modification of this operation was recommended by Pillore, who opened the cæcum from the right iliac region. This would have been the only operation advisable in my case.

Callison's operation was suggested as an improvement on Littre's. This is to be performed in the left lumbar, instead of the left iliac region, for the purpose of not wounding the peritoneum. Callison, in order to accomplish this object, directs a vertical incision to be made between the last false rib and the crest of the ilium, parallel with the external or anterior margin of the quadratus lumborum muscle. Amussat, to improve this operation, used the transverse, instead of the vertical incision of the integument and muscles. The advantages that he claimed are:

1. That it makes the operation easier and more certain, and avoids the danger of dividing the lumbar vessels and nerves.
2. It greatly facilitates the discovery of that portion of the intestines destitute of peritoneum, as well as the opening of the former without wounding the latter.
3. That it enables the artificial anus to be established more anteriorly.

Amussat has also extended the applicability of his operation to the ascending colon. Hence, by his method, it may be performed either in the right or left lumbar region, according to the situation of the deformity.

In conclusion, permit me to add a synopsis of cases, in tabular form, illustrating the three classes of operations spoken of above. (*See pages* 30 *and* 31.)

From these facts I think the preference should be given to Littre's operation of opening the sigmoid flexure, when the malformation exists in the rectum. Should the deformity exist above the sigmoid flexure, the operation of Pillore, of opening the cæcum in the right groin, should be employed, since neither of these operations are as complicated as that of Dr. Amussat. Moreover, should the malformation be situated in the ascending, transverse, or descending colon, the cæcum, or at least the lower portion of the small intestines could be reached. The only great objection to either of these operations consists in the fact that they wound the peritoneum, which is not as dangerous as a great many seem to think, as is proven by the successful termination in operations for strangulated hernia.

TABLE I.

Operations performed by Puncture.

OPERATOR.	SEX.	NATURE OF OPERATION.	RESULT AND PERIOD.	REMARKS.
Curling	F.	Gut reached.	Fatal, 9 days.	Rectum reached and no meconium followed.
Curling	F.	Gut not reached. Colotomy in left loin.	Fatal, 18 hrs. after 2d operation.	Died from wounding peritoneum in first operation.
Curling	F.	Gut not reached. Colotomy in left loin, and gut not reached in colotomy.	Fatal, 9 days after birth.	
Amussat	M.	Gut not reached. Colotomy in left groin.	Successful.	Lived to an age of 7 years.
Edwards	M.	Gut not reached.	Fatal, 24 hours.	Died of peritonitis caused by wounding in operation.
Thomas	F.	Gut not reached.	Fatal, 7 days.	
Parker, of New York	M.	Gut reached.	Fatal, 24 hours.	
Parker, of New York	M.	Gut reached.	Successful.	Died from croup at an age of 2 years.
Hunter	F.	Gut reached.	Fatal, 2 days.	
Dyce	F.	Gut reached.	Successful, 4 weeks.	
Wayte, of Edinburgh	M.	Gut reached.	Fatal, 6 months.	Unsuccessful in maintaining anal opening.
Crampton, of Dublin	M.	Gut reached.	Successful.	Patient alive at 4 years.
Disoumux	M.	Gut reached.	Fatal, 9 days.	
Guersaut	F.	Gut not reached.	Fatal, 2 days.	
Jenner	M.	Gut not reached.	Fatal, 9 days.	
Johnson	M.	Gut not reached. Colotomy in left groin.	Fatal, 2 days after 2d operation.	Recto uterine pouch opened in 1st operation.
Pretty	M.	Gut not reached.	Fatal, 24 hours.	Death from overdistension and rupture of ascending colon.
Mason	M.	Gut reached.	Fatal, 24 hours.	

TABLE II.

Operations by Incision through Perineum.

OPERATOR.	SEX.	NATURE OF OPERATION.	RESULT AND PERIOD.	REMARKS.
Curling	M.	Gut reached. Drawn down and attached at the anus.	Successful.	Lived at age of 6 months.
Peck	F.	Gut reached.	Successful.	Lived at age of 2 weeks.
Le Gross	M.	Gut reached.	Successful.	Lived at age of 9 years.
Jones	M.	Gut reached.	Successful.	Lived at age of 2½ years.
Corse	F.	Gut not reached.	Fatal 4 days.	
Shaw	M.	Gut reached.	Successful.	Lived at age of 5 years.
Blackman		Gut reached.	Fatal.	

TABLE III.

Operations by opening Sigmoid Flexure of Colon.

OPERATOR.	DATE.	SEX.	AGE.	RESULT.
Duret	1793	M.	2 days.	Living at 46 years.
De Sault	1794	M.	2 days.	Death 4 days after operation.
Voisin	1798	M.		Unknown.
Desgranges	1800	F.	4 years.	Living 8 mos. after operation.
Voisin	1802	M.	10 days.	Ilium opened. Death, 4 days.
Duret	1809	M.	2 days.	Died 4 or 5 days after operation.
Legris	1813	M.		Died 17 days after operation.
Serrand		F.	60 hours.	Living 22 mos. after operation.
Surgeon of Lyons		F.		Successful.
Surgeon of Brest		F.		Fatal.
Freer	1815	F.		Fatal in 3 weeks.
Mirriel	1816	F.	2 days.	Living 19 years after operation.
Mirriel	1822	M.	3½ days.	Living 13 years after operation.
Mirriel	1823	F.	6 days.	Living 2½ years after operation.
Texter	1826	F.		Fatal in 8 days.
Schlagintweit		F.		Unknown.
Biziet	1830	M.		Lived 1 month.
Biziet		M.	4 days.	Died in 24 hours.
Ouvrard		F.	2 days.	Died suddenly.
Kleiwitz	1835	M.	3½ days.	Lived 2 years 10 months.
Roux	1837	M.		Died in 2 hours.

ABORTION.—*Dr. Tate* desired to call the attention of the Academy to the case of abortion reported at a previous meeting. The patient aborted at the time she was suckling a child. The abortion was accompanied by severe hemorrhage. After the expulsion of the ovum, a clot of blood was found upon the exterior of the membranes between the chorion and the decidua reflexa, partially projecting against the decidua serotina. In order to refute the idea of certain members of the Academy that lactation is not a predisposing cause of abortion unless accompanied by debility, the speaker quoted Bedford and Barnes. As to the expectant treatment in cases of abortion at the third month, where the placenta is retained, Simpson relates a case which illustrates most conspicuously the dangers accruing to the female from the retention of the placenta. Cazeau was also cited to enforce this statement. There are two dangers which may result from non-interference. The first is that the hemorrhage may undermine the constitution of the female; while in the second place the retained placenta may give rise to purulent infection. Denman and Ramsbotham recommended the use of ergot in those cases, and if any portion of the placenta be retained they employ injection of liq. sodæ chlorinatæ to prevent purulent infection. They further urge that if the hemorrhage be excessive other methods should be adopted, *e. g.*, introducing the finger into the uterus, and thus removing the placenta and simultaneously arresting the hemorrhage. The speaker thinks that this could be accomplished in all cases. Tyler Smith considers this manipulation preferable to the use of ergot, which he thinks unreliable in cases of abortion.

Dr. Wright admitted that lactation, if long continued, might produce abortion. He thinks it possible that nervous females may abort shortly after conception. He also admitted that early hemorrhage might produce abortion, but he knew of cases where pain and daily hemorrhage had existed, and nevertheless the patient carried to full term. Yet if the hemorrhage had been so excessive as to exhaust the strength of the female, the finger might be introduced into the cervix to separate the placenta and cause the expulsion of the ovum. Where the uterus is low down in the pelvic cavity, pressure may be made upon the symphisis pubis. But it is no easy matter to introduce the finger at the second or third month in order to withdraw the ovum. This might be done in a dilated condition of the vagina, but the difficulty of such procedure is sufficiently proved by the great number of appliances invented for the removal of the placenta and ovum.

Decomposition of the placenta and blood-poisoning might occur if the case be left to nature, yet these are not the leading features in abortion. He then referred to cases in which the placenta was retained until a subsequent delivery, and yet no untoward symptoms followed. The doctor agrees with the previous speaker as to the treatment of abortion by manual interference when a fatal result was impending from hemorrhage. It would always be better to avoid rupturing the membranes, a result which is greatly to be feared if such manipulations be employed. He would leave the case to nature, even when in a case of threatened abortion there be moderate hemorrhage and more or less expulsive efforts. He further considers interference excusable only when the death of the fœtus is certain and the hemorrhage very copious. This procedure is perfectly justifiable if the life of the mother be in jeopardy.

ABSCESS OE THE CEREBELLUM.—*Dr. Carson* presented a specimen of an abscess of the cerebellum, of the size of a hickory-nut, which had been sent him for exhibition. He thinks that this might have been the result of embolism, still the letter (containing the history of the case) does not indicate any such symptomatology. The patient was seized suddenly with insensibility and coma, having presented nothing peculiar on the previous day. Death took place in two days after the attack. The patient had been an inmate of the asylum and the history was somewhat incomplete.

Dr. Whittaker remarked that as such affections of the cerebellum are extremely rare, it was exceedingly to be deplored that the full history of this case could not be ascertained. There has been a controversy among physiologists as to the functions of this portion of the encephalic mass. It has been established by Flourens from experiments on pigeons that a removal of a portion of the cerebellum is followed by loss of the power of muscular co-ordination. But it was found that the pigeons recovered after two or four weeks and that the co-ordinating power returned. Subsequently it was thought that this loss of co-ordination did not depend so much upon the removal of the cerebellum *per se*, as upon the vertigo or perhaps the shock incident to the operation. The theory of vertigo, however, was now no longer maintained, while the bulk of evidence still inclines to the view that the chief function of the cerebellum is to co-ordinate muscular action. As such opportunities of clinical confirmation in man of the effects of experiments upon animals are so rare, every attempt should be made to obtain complete accounts of symptoms.

OCCLUSION OF RECTUM.—*Dr. Querner* reported that he delivered a woman a few days ago of a child which had no passage from its bowels on account of atresia recti. He first introduced a probe to the depth of one inch, then his little finger, and found the rectum closed. The little patient was vomiting incessantly, but did not present any other peculiar symptoms. He asked advice as to the best manner of cutting down upon and searching for the other end of the rectum.

Dr. Richardson replied that the difficulty might possibly be overcome by the use of a conical bougie, moderate pressure being simultaneously made by means of an elastic bandage. He considered this treatment the most adequate and far superior to cutting, provided the case be not one of complete atresia recti.

TUBERCULOSIS.—*Dr. Ludlow* reported the case of a lady 35 years old, who suffered from subacute bronchitis originating in the tuberculous diathesis. Having been placed upon a tonic treatment for three years by the administration of bark and cod-liver oil, she finally recovered. She married two years afterward and gave birth to three children. One week ago she was attacked by a violent inflammation of the left lung, the right one being intact. The physical signs were bronchial rales, bronchophony, etc. She continued lingering, growing worse daily, and succumbed last night without any struggle.

PUERPERAL FEVER.—*Dr. Jessup* called the attention of the Academy to the puerperal fever prevailing in Covington, Ky. Dr. Smith adopted a moderate antiphlogistic treatment, using cathartics and diaphoretics, especially calomel and opium. There is a controversy among physicians as to the remedies most apt to meet the indications. Some advocate copious bleeding at the onset, others rule venesection out entirely, whereas they recommend opium and a supporting diet, stimulants, and cathartics. They administer opium very largely and at an early stage to the extent of relieving pain, yet without trying to produce narcotism, being governed by the idiosyncrasy of the patient. The disease presents great diversity of manifestation, according to which the treatment should vary.

Dr. Richardson related the case of a lady who suffered from excruciating uterine pains. The uterus extended above the brim of the pelvis, and was considerably enlarged and very hard to the touch. Administered morph. gr. ¼, combined with quin. gr. ij, repeated every two to two and a half hours until the first effects of the opiate were produced, which were then sustained. Under this treatment, the pulse reduced to 135–136, and continued for thirty-six hours, then 130 for the next twenty-four hours. The uterus was not yet reduced in size, but the tenderness remained limited to its investing membrane. The speaker found that whenever such emergencies require opium to be resorted to, the addition of calomel or pil. hydg. changes the nature of the case at once, and he referred here to three cases in his practice in proof. So here pil. hydg. proved a very efficacious adjunct to the above-named agents in that the uterus softened very promptly, the pulse falling to 115–116. Antiphlogistics generally hasten a fatal result; quinia and opium soon cause a favorable turn of the disease.

Aneurism of Arch of Aorta.—*Dr. Bartholow* met with an aneurism of the arch of aorta in a man about 50 years old. The symptoms were difficult breathing, stridulous cough, swollen face, pupils of unequal size, hoarse voice, occasional distressing paroxysms of dyspnœa and delirium in consequence of carbonic acid poisoning; the left radial pulse was imperceptible, the right was felt distinctly; a tumor presented itself on the upper part of sternum, pulsation well marked under the same, bruit distinctly audible. The dyspnœa was due to the pressure of the tumor on the recurrent laryngeal nerve, the distribution and relations of which are well known. Administered pot. iodid. ʒss ter die internally and ergot in gr. ss. hypodermically, the latter on Langenbeck's plan. The patient recovered rapidly; there remained only some distress of breathing on exertion. He would improve, however, decidedly if he could maintain the recumbent posture.

Dr. Ludlow knew of a case quite analogous to that mentioned by Dr. Bartholow in which 20 gr. doses of iodide of potassium had been given for 5–6 months with very satisfactory results. The speaker's statement was confirmed by Dr. Graham, the consultant in the case, with a detail of the prominent symptoms.

Articular Rheumatism and Pneumonia.—*Dr. Reamy* reported a case of articular rheumatism involving the upper and lower extremities. The patient had previous attacks six years ago. Pneumonia developed two days ago with all the signs peculiar to the disease except that there was no pain in the chest, nor did he complain of difficult breathing. Pulse 130, temperature 104, respiration 38, abundant rusty expectoration; dullness on percussion, crepitant rales. The rheumatism was subdued by appropriate medication. As soon as the pneumonia developed, he was put on quinia and aconite. Result favorable. The case is mentioned only on account of its complications.

EDEMA GLOTTIDIS.—*Dr. Whittaker* gave the history of the case of an Italian boy who presented symptoms resembling those of acute tonsillitis, viz: difficulty of breathing, congested face, throat cough. There was also complete aphonia. On examination, he found the uvula elongated and caught in the rima glottidis, which circumstance accounted for the aphonia. The patient was seized during the examination with a paroxysm of violent coughing, which extruded the uvula with its extremity so œdematous as to resemble a Malaga grape. It was finally caught with a tenaculum and split open with a bistoury. A quantity of serum escaped at once with entire relief of all the distressing symptoms. On the next day the patient was perfectly well.—*Clinic.*

CLARKE COUNTY MEDICAL SOCIETY.

Reported by Dr. ISAAC KAY.

The Clarke County Medical Society met November 14th, Dr. J. H. Rodgers, vice-president, in the chair.

Members present—Drs. Banwell, Bryant, Harris, Hazzard, Kay, Reddish, McLaughlin, R. Rodgers, J. H. Rodgers, Reeves, and Senseman.

Dr. McLaughlin addressed the meeting relative to the life and death of Dr. Rector, late a member of this society, and deceased since its last session. Dr. M. said that Dr. Raper Rector was born July 11, 1838, near Tremont, in Champaign county, Ohio. His grandfather, Charles Rector, was one of the first white settlers in the Mad River valley. After acquiring a good common school education, and having married early in life, the subject of these remarks commenced the study of medicine, and graduated at Starling Medical College. He located in Northampton, in this county, where he enjoyed a lucrative and reputable practice, up to the time of his death. He grew rapidly in the favor of the people, both as a man and a physician. During the latter part of last September, Dr. R. was attacked with typhoid fever, which terminated fatally on the 10th day of the following month. Quite a number of physicians, mostly members of the society, visited the doctor during this, his last illness, and gave their best counsels by way of assistance to Dr. Thatcher, the regular medical attendant Dr. Senseman and the speaker called to see him the day before his death, and found him somewhat comatose, and scarcely conscious of external objects. Dr. Rector was a man of genial nature, and of a high order of social qualities, a good intellect, and excellent habits. He was temperate and industrious. He was warmly attached to the Clarke County Medical Society, and attended its meetings whenever he could conveniently do so. He was friendly with all its members; courteous in his conduct toward them all, in his remarks during the discussion of medical or other topics which came before the society; and every one could testify to the soundness of his opinions in reference to medical theory and practice. Dr. Rector was a member of the Methodist Episcopal Church, and was sustained and cheered, in life and in death, by the consolations of the Christian religion.

After the conclusion of Dr. McLaughlin's excellent and appropriate remarks in thus formally calling the attention of the society to the death of a fellow-member, the chair, in accordance with a motion to that effect, appointed a committee of three, to report at the next meeting resolutions expressive of the sense of the society relative to Dr. Rector's death. Drs. Bryant, Kay, and McLaughlin were the committee appointed.

Dr. Bryant laid before the society a specimen of uterine supporters, of his own invention. In devising this instrument the doctor had laid aside the consideration of all previous inventions, and commenced the rigid study of the anatomy, physiology, and pathology of the parts implicated. The instrument exhibited was truly an ingenious and neat affair, and will evidently accomplish all that the doctor claims for it. It differs radically in its construction from anything of the kind that was ever before presented to the medical profession, and will doubtless elicit much attention in the future.

The subject of rheumatism was then taken up. Dr. Banwell read an essay upon the subject under consideration. After noticing the various different kinds of rheumatic affections, the essayist stated that probably one-fourth of the people between the age of puberty and forty years, suffer in some degree from rheumatism. In many instances it seems to be hereditary. The predisposition is stronger in the athletic than in the anemic. The characteristic symptoms are almost identical with common inflammation, viz: heat, pain, redness, and swelling of the parts. This inflammation is not confined to any particular tissue, although it principally attacks the fibrous. One of the most notable complications of rheumatism is cardiac disease. Pleurisy and pneumonia are rarer complications. Dr. Banwell then proceeded to discuss the treatment of this strange and painful malady.

Dr. Reeves commented favorably upon the manner in which Dr. Banwell had treated of rheumatism in his essay. Rheumatism was a disease in which a great variety of treatments had been adopted. The gist of the controversy upon this point seemed to consist of the question as to whether the acid or alkaline treatment should be employed. In many cases bleeding seemed to be indispensable. It afforded immediate and permanent relief. This plan should be pursued where there is a plethoric condition of the system. The regular profession should not be made to swerve from this philosophical course, even by all the protests that could be made by quacks and ignorant old women. In the treatment of arthritic rheumatism, the silicate of potash bandage is coming into favorable notice. The parts diseased should be at perfect rest. In order to secure rest, the patient should, if necessary, be splinted down, and not allowed to move about. The chief benefit of opium consisted in the profound rest which it insured. The perfect quiet thus produced, permitted the limbs to recover. In many cases of rheumatism we had to contend with the gouty diathesis. In chronic rheumatism of the arthritic variety, with accompanying gouty diathesis, the wine of colchicum acted as a specific remedy. There was nothing like it. There was far less heart complications in these rheumatic cases than was generally supposed. Subacute rheumatism was almost always connected with deranged liver, from malaria. He had found blue mass and quinine quite beneficial in subacute rheumatism.

Dr. McLaughlin spoke of the essential character of rheumatism. We had acute rheumatism, chronic rheumatism, arthritic rheumatism, and other varieties. These varieties of inflammatory and febrile disease should be treated as strictly upon the antiphlogistic plan as in any other inflammation or fever. He had always had the same success in treating rheumatism as in any other febrile disease. Sedatives were highly important. Water was no more certain to quench fire than sedatives to quiet the rheumatic condition. Blisters were also good—in some cases almost infallible. In the chronic form of the disease, and in lumbago, use cimcifuga and phytolacca. When the system is plus the acid condition, use alkalies; when the system is plus the alkali, use the acid. This has been his general plan in regard to the acid and alkaline treatments.

Dr. Senseman thought that rheumatism was essentially an inflammation. So far as specific remedies were concerned, Dr. S. considers colchicum root made into tincture, and also nitrate of potash, as among the best. The general antiphlogistic plan should be usually pursued.

Dr. Bryant thought that sufficient attention had not been paid to the diagnosis of rheumatism. All the reliable tests should be used. Litmus paper would determine whether the system was in the acid or alkaline condition. This test would soon point out the proper remedy, or rather *class* of remedies, that should be used. Dr. B. gave detailed accounts of cases occurring under his own observation. He had used the sulphate of quinine with the most marked benefit in bad cases. It diminished the frequency of the pulse and caused moisture of the skin. Bleeding should sometimes precede the use of sulphate. He had also been pleased with the use of the steam bath. This expedient was highly spoken of by the late medical journals. The doctor discussed the theory of perfect rest as secured by the splintering process alluded to by Dr. Reeves. Rheumatism comes from a constitutional cause. It is not simply local in its nature. Rheumatism and neuralgia are full brothers, in kind.

Dr. Harris believed that heart complications occurred more frequently than some of the speakers had admitted. He had witnessed numerous cases of the kind in eastern hospitals. Many of these cases of cardiac disease, connected with rheumatism, were in persons who lived many years with it before they died. Care should be taken in making stethoscopic examinations. He was favorable to the use of the litmus paper. He had been highly delighted with the use of the bicarbonate of potash in drachm doses. Dr. H. spoke of the lactic acid theory of rheumatism.

Dr. Hazzard discussed Dr. Fuller's views of the lactic acid theory. The excess of the lactic acid must depend upon the peculiar inflammation. Dr. Hazzard had noticed a large proportion of heart complications in rheumatism. It was easy to tell a real heart trouble from a mere nervous disturbance of that organ. Dr. H. always carries litmus paper with him, so as to be ready to make a diagnosis upon the spot. Use colchicum with the alkalies in the acid diathesis. Permanganate of potash is very beneficial in chronic rheumatism. He had not bled for rheumatism during the last eighteen years. Opium and hydrate of chloral might be used to secure rest.

Dr. R. Rodgers regarded rheumatism as an inflammation of the fibrous tissues. Bleeding should be used in the highly sthenic condition of the system, but not otherwise. Colchicum, combined with some of the preparations of magnesia, constituted a pleasant and effective combination in the treatment of many cases of chronic rheumatism.

Dr. Kay remarked that he had occasion to take a special interest in the subject under consideration. His graduation thesis was upon rheumatism, and he had met with some quite severe cases of the malady at the very outset of his practice. He had a strong degree of confidence in the curative powers of several articles of the materia medica, especially the meadow saffron alluded to by others, and opium, together with the several salts of potash, and more particularly the acetate. He gave a case or two as treated according to the sedative plan. One of the strange and inexplicable mysteries connected with this whole subject was as to how the same diseased condition, essentially, should be produced by causes so diametrically opposite in their character as the acid and the alkaline diathesis. Yet such seemed to be the fact, and we were under the necessity of conducting ourselves accordingly. That is, we should be prepared with our litmus and other tests, and then apply remedies, as it were, upon strictly chemical principles. But this should not constitute the whole of our treatment. We should use the sedatives and alteratives, and as well also the saline depurants.

After a session of three hours the society adjourned to meet again on the second Tuesday in December, the principal topic to be *Neuralgia*.

Correspondence.

MR. EDITOR: I have often thought of reporting a very singular case that came under my observation several years ago, but have deferred it from time to time until the present moment.

On the 29th day of June, 1866, I was called in great haste to Mrs. W———, aged 38 years, married, mother of three children, of a nervo-lymphatic temperament, tall of stature, muscular system pretty well developed, but her whole physique indicated a looseness of construction that is much more readily recognized than described. For two or three days prior to the one on which I was summoned, her bowels had been quite loose, each discharge being attended and followed with considerable tenesmus; so strong and persistent had this straining effort become, that she apprehended abortion, inasmuch as she supposed herself to be six months pregnant. Some two or three hours previous to my arrival, and during a strong and persistent effort (while in the privy) to evacuate her bowels, she suddenly felt, to use her own language, that all of her insides were about to come away. Being unable to walk, she was taken to her bed, where I found her but a short time subsequently.

Her appearance indicated much alarm, to which she confessed, declaring that such a degree of emptiness, coupled with so much dragging-down pains, could be the result of no ordinary trouble. I endeavored to relieve her anxiety and agitation, by assuring her that she had aborted; and the removal of the fœtus from the vagina, and the application of the bandage would soon restore her normal feelings. Being confident that I had rightly prejudged the case, my confusion and disappointment were but illy concealed, when the touch revealed a condition of things at once unique and embarrassing, at least to me. I was prepared to encounter either extremity of a fœtus, but that hard roundish tumor, crowned with a fleshy protuberance, strongly indented at the presenting extremity, and the whole mass apparently immovably fixed in the vagina, but still perceptible above the pubes, could suggest no idea to my mind other than a large fibrous tumor of the uterus, which the straining at stool had thrown into the vagina. But an ocular inspection proved the fallacy of this impression; for then I recognized the tumor to consist of, probably, the child's head covered by the muscular walls of the uterus and vagina, projecting beyond the vulva about two inches, and pressing hard upon the perineum. The remains of the cervix and undilated os constituted the apex. I could distinctly see the network of blood vessels ramifying the walls of the distended vagina. The os was undilated, and in every respect appeared healthy. The necessary handling of the mass excited but little inconvenience. Being now satisfied that I had a case of prolapsion of a gravid uterus, I immediately made efforts to restore it to its normal position. After well lubricating my hand with lard, I placed my fingers on the body of the womb, encircling the cervix, and pressed upward and backward, gradually increasing the force, until her cries of pain admonished me to desist. In the absence of chloroform, I administered one-third of a grain of morphia sulphas, hoping it would accomplish a three-fold purpose, viz: control the action of the abdominal muscles, produce a general relaxation of all the parts, and blunt sensibility. Waiting until the morphia began to take effect, I renewed the taxis, directing my pressure with strict regard to the axis of the pelvis. After some ten or fifteen minutes of determined effort, which gave a good deal of pain, I discharged the uterus with its contents, and carefully raised it above the brim of the pelvis. I think Mrs. W—— has the most capacious pelvis that has ever passed under my observation. I ordered absolute rest in a horizontal position for a few days; and in order to counteract any perturbing influence from the bowels, or inflammatory excitement from manipulation, I prescribed morphia sulp., one-quarter of a grain, to be given every three or four hours, as pain or restlessness seemed to require, and left to wait further developments.

Hitherto the uterus had been passive, but by the expiration of twenty-four hours, its action became so violent that it expelled its contents before assistance could be procured. The fœtus was between five and six months old probably, but not so well developed as usual at that age. The uterus appeared to retain its usual position for the time being, but Mrs. W——'s health was very indifferent for some time afterward, but as to the nature of her trouble I am not advised, as she passed from under my care. I think she has not become pregnant since. This case presented to my mind two facts, neither of which I was ready to accept before demonstrated, viz: that the contractions of the abdominal muscles were sufficient under the most favorable circumstances, such as capacity of pelvis and position, to drive a gravid uterus, containing a fœtus not less than five months old, with its annexæ, so nearly through the vagina. The other is the possibility of the uterus remaining *in situ* under the most violent contractions of its own muscles, after so recent and thorough displacement.

J. S. R. HAZZARD, M. D.

SPRINGFIELD, CLARKE CO., O.

CRAWFORDSVILLE, IND., *November* 8, 1872.

EDITOR LANCET AND OBSERVER—*Dear Sir:* My attention the past summer was called to a case of undue retraction of the muscles after amputation in the middle third of the thigh. Every form of bandaging failed and protrusion of the bone threatened to render a secondary operation an absolute necessity. I applied broad adhesive strips from the upper part of the thigh, and cut long enough to extend five or six inches below the stump. These ends I tied together. I then enveloped the limb with a "stove-pipe" splint, made of a zinc plate, and perforated with holes for ventilation, and having placed pads around the limb, I buckled straps around this splint to confine it closely to the limb. I then attached a cord with a weight and pulley to the free ends of the adhesive straps. This stopped the retraction of the muscles of the thigh and brought them, in a few days, well down over the end of the bone. Union of the soft parts now took place rapidly and a very perfect stump was the result. Two causes principally contributed to this. The equal and perfect pressure exerted by the splint and the steady continued extension of the weight, acting on the skin and superficial muscles through the adhesive strips. I have since used the same appliance in a recent case of amputation, with to me the most satisfactory results, and shall in the future use some such appliance (in every case of amputation of the long bones) for the first eight or ten days as a curative, and precautionary remedy.

J. S. MCCLELLAND, M. D.

Fresenius and his Laboratory.

By J. S. UNZICKER, M. D.

Dr. R. Fresenius, although fifty-four years of age, is yet in his prime of life, as regards mental and physical activity. Being one of those few hard workers and original thinkers, he has accomplished much for science and mankind generally. Of his great reputation as a chemist I need not speak—that is well known to all men of science. But as a man also, no one stands higher in the community, nor more respected by all who know him, than he does, for his urbanity and universal kindness toward all who may come in contact with him.

It is not in chemistry alone that he has built up a great reputation, but has also rendered great services in natural science, public education, agriculture, and manufacturing. All of which he has, and is still aiding by his extensive knowledge and labors. In acknowledgment of this, the government has conferred upon him the title of "Privy Counselor of Court."

LABORATORY.

This is a private institution assisted by the state, but owned and under the entire supervision of Dr. Fresenius. It is located on "Capell strasse" in Wiesbaden. The building is one hundred and twenty feet front, overlooking the city, with a fine view of the Taunus mountains in the distance.

The laboratory includes three distinct departments:

1. QUALITATIVE ANALYSIS.
2. QUANTITATIVE ANALYSIS.
3. MANUFACTURING.

Students entering the institution commence work in the *qualitative laboratory*, which is a room twenty-four by forty-five feet, well lighted, and accommodating thirty-three students. The room is furnished with a set of Bunsen's filtering pumps, glass blowers, lamps for fusions and apparatus for keeping up a constant supply of distilled water. By means of large wooden hoods shut off from the laboratory by glass sashes, all noxious vapors are conducted off. Each student has his work table, also a closet with lock and key attached thereto. The course of work consists in the analysis of one hundred different substances of unknown composition. Fresenius visits his students daily, and always expects a detailed account of the work of each; and where a difficulty arises, lays great stress on the importance of every reaction being tried for itself. The *quantitative analysis* is conducted in a room twenty-four by forty feet, having tables for nineteen students, and is fitted with all the necessary apparatus like the first. In this as well as in the former room, two assistants representing Fresenius are constantly occupied. The *quantitative assaying room*, accommodating six students, is furnished with a cupel and assay furnaces, etc. H. S., as a reagent, is employed only in the open air. For which purpose an apparatus yielding a constant supply and covered by a hood is convenient to each room. The *balance room*, containing nine chemical balances, is situated between the two quantitative rooms, and is carefully heated to a constant temperature. The course of work in the quantitative department consists in the analysis of about fifty different minerals; alkalies, ores, paints, dye stuffs, coal, soap, and manure; fire assays and elementary analysis of sugar, starch, gum, gas analysis, etc. All quick and practical methods for purely technical purposes are here most thoroughly worked out, and students can fit themselves to become at once chemists in all branches of manufacture.

In the *manufacturing department*, the chemical reagents used in the institution are made in a state of almost absolute purity by an experienced assistant of Fresenius. In the *furnace room* you will find sand-baths and retorts for the purification of acids, etc. Here instruction is given in special branches of manufacture, as of aniline colors, crystallized salts, etc. The *library room* contains a complete selection of all standard works and journals relating to chemistry and all branches connected therewith, where students can retire for consultation. The *store room* contains a complete selection of all chemical apparatus, where students can supply themselves at low rates. There are also two *lecture rooms; a private test room*, with analytical balances and other apparatus, to prove the correctness of important analysis. Next comes the *private laboratory*, *library*, *study*, and *reception rooms* of Fresenius. The best students, after completing their studies, are generally allowed to become private assistants to Fresenius in his own laboratory. These positions are much sought after, yielding no pay, but affording the greatest opportunities for more perfect and practical experience. Students have to provide themselves with all the small utensils and apparatus necessary, but all large ones are loaned to them by the institution. The *pharmaceutical de-*

partment connected with the institution, is also assisted by the state. The summer semester (course) begins April 24th, and continues four months. The winter semester begins October 15th, and continues four and a half months. The charges are very moderate, being only, for a full laboratory course of one semester, $33.20. It is, however, optional with students to work as many days in the laboratory as they please, for which proper deduction is made. This arrangement or declaration must be made at the beginning of the session.

The honorary fees for the lectures of the institution are as follows:

Experimental chemistry, first division	$6 00
Experimental chemistry, second division	6 00
Organic chemistry	6 00
Special theoretic chemistry	3 20
Experimental physics, first division	4 00
Experimental physics, second division	4 00
Botany, first division	4 00
Botany, second division	4 00
Zoology	4 00
Mineralogy	4 00
Pharmaceutical chemistry	4 80
Pharmacognoscy	4 80
Repetitorium on pharmacy	2 40
Chemical technology, inorganic division	3 20
Chemical technology, organic division	3 20

By this, it will be seen that this institution offers advantages not easily found elsewhere. Manufacturers and advanced chemists, who wish to perfect themselves practically in some special branches, will find no better opportunities than here, under so renowned a teacher, who is master of his art. Wiesbaden is one of the most charming places to live, and as the surrounding country offers great advantages for the study of botany, weekly excursions are made by the professor of botany during the summer semester, giving a chance to each student to pursue his studies practically and collect a nice herbarium for himself.

May this good institution long continue in its present flourishing condition, and may the young chemists issuing therefrom, never forget their "alma mater," and in their future professional lives, try and imitate their great teacher.

Selections.

Remarks on Balsam of Copaiba—Tested Copaiba. By Armand Fumouze, M. D., Paris.—Balsam of copaiba was formerly only made use of in the treatment of gonorrhœa, that is, in cases in which its use could not be dispensed with. But since the repulsive odor and taste of this remedy have been perfectly concealed by inclosing it in capsules, and particularly since the happy innovation of Raquin, in 1837,* who substituted gluten for the gelatine, heretofore made use of in the manufacture of the capsules, its use has been considerably extended.

Like turpentine, it is at present administered in various affections, and has even obtained some special applications.

Besides its special action on vesical and urethral catarrh, it is rationally designed to subdue inflammatory affections of the mucous membranes, in which the use of oleo-resins is indicated. It has been successfully employed by Halle, Armstrong, Ribes, Delpech, Laroche, Lisle, Brettonneau, and Hirtz in the treatment of chronic bronchitis.

In 1866, Trideau† stated that he had successfully treated the croup by its internal administration. The facts quoted by this observer appeared to be at first improbable, but were subsequently

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*Academy of Medicine of Paris, June 27, 1837. Report by M. Raquin on a new method of administering copaiba, unanimously approved of: "The gluten capsules do not usually cause any unpleasant sensation in the stomach, do not produce any eructations, which is more or less the case after the administration of the other preparations of copaiba, even of the gelatine capsules. It is probable that they only *soften* in the stomach and dissolve in the intestines."

The gelatine and gluten capsules are almost instantaneously dissolved in artificial gastric juice at 100° F., the action of Raquin's capsules would not therefore be due to their passing undissolved into the intestine; but, as will hereafter be seen in the author's note, owing to the almost invariable relative proportion of the essential oil and resin contained in Raquin's capsules, in other words, tested copaiba; the essential oil, as an excipient and adjuvant, modifying the irritant action of the resin.—TRANSLATOR.

†Trideau: Traitement du Croup et de l'Angine Çouenneuse, Paris, 1866.

confirmed by the experiments of Bergeron, Héraud, Dumontpallier, and Archambault.

The cases quoted by the latter are probably the most convincing; three cases undoubtedly recovered, under the *exclusive* use of Raquin's copaiba.

Professor Hardy* was undoubtedly successful in treating psoriasis with copaiba.

In the hands of eminent practitioners it has proved itself to be a powerful hæmostatic; Garrod, Duffin, etc., have made use of it as a diuretic in the treatment of ascites, and in several cases with good results.

Finally, copaiba has been prescribed in the treatment of leucorrhœas, intestinal affections, neuroses, and intermittent fever. It is also an anthelmintic and a powerful parasiticide.†

Usually the effects of copaiba, like those of the other turpentines and balsams, are only obtained by contact; that is to say, its therapeutical action is only exerted on the organs by which it is eliminated and in proportion to the amount of the substance eliminated (Gubler). As copaiba is composed of an essential oil, holding in solution a certain proportion of resin, which is itself composed of copaivic acid, and of a minute portion of soft resin, it only remains to ascertain which are the channels of elimination of its constituent principles. According to the rule laid down by Gubler,‡ substances which are foreign to the economy are eliminated by the emunctories of the normal elements which they resemble. Thus, volatile substances, such as the essential oil of copaiba, are exhaled by the sudoriparous glands and the respiration; its neutral salts and salifiable substances, for instance, the resin, are principally eliminated with the urine. If this theory were absolutely correct, it would suffice to administer separately the resin of copaiba in affections of the urinary organs, and the essence in those of the respiratory organs and skin.

But Bernatzick‖ has demonstrated by his experiments that this process is not quite so simple. This observer has just shown that the essence of copaiba is not entirely eliminated by the respiratory organs and the sudoriparous glands; but that a noticeable quantity of this essence, from four to five per cent., becomes oxidized in the organism, and is eliminated with the urine in the form of resin. A small portion is also passed unaltered in the urine, and gives to it the odor "sui generis," which it is found to possess after the administration of copaiba.

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*Hardy: Lecons sur les maladies de la peau, Dartre, Scrofulides, Syphilides, 2me ed. p. 119. See also Dupuy: Traitament du psoriasis par le Baume de Copahu, Thèse de Paris, 1857.

†Fröhlich: Zur Behandlung der Kratzes: Allgem. Milit. Arztl. Zeitung, 26 and 27, 1870.

‡Gubler: Commentaires thérap., preface, p. xiii, Paris, 1868.

‖Bernatzick: Pharmac. Studien über den Copaiva Bals. Prag. Vjhschr., C. (xxv. 4), p. 239, 1868.

According to him, the resin of copaiba passes through the urine in the proportion of from 10 to 13 per cent. of the amount of resin administered. The elimination of this substance by the kidneys considerably increases the urinary secretion, and does not communicate any odor to it.

Having ascertained these facts, Bernatzick desired to test the separate curative action of the balsam, also of its essence and its resin, on gonorrhœa.

Admitting that the therapeutical effect of balsam copaiba on the vesical and urethral mucous membranes is due to the contact of the urine charged with its medicinal principle, it might be believed that the resin of copaiba would be the sovereign remedy against those diseases, since the active principles of the balsam are eliminated in a resinous form by the urine. But such is not the case. Bernatzick always obtained better results with the copaiba itself than with the resin, and for the following reasons: After a few days the resin is not easily tolerated by the intestines, and its absorption by the digestive organs is diminished; consequently, the proportion of the resinous principle eliminated by the urine is considerably reduced; it even becomes frequently necessary to suspend the treatment. With the balsam this disadvantage is much lessened, the remedy is more readily tolerated by the intestines, and the proportion of resin eliminated by the urine is about the same during the whole course of the treatment.

As to the essence of copaiba administered separately, it has an evident action on urethral catarrh, but insufficient to induce resolution.

Bernatzick's experiments demonstrate the important fact that *the active principle of a medicinal substance*, such as the resin of copaiba in relation to gonorrhœa, *may be practically inferior to the substance itself, as it is less readily absorbed by the organs of digestion.*

Indeed, it is not sufficient to isolate the active principle of a medicinal agent, but an *excipient* must be found for the principle thus isolated, and frequently the best excipient, as in the copaiba, is furnished by nature itself. Here the essence is not only an excipient, but it is also an adjuvant. Whilst it lessens the irritating effects of the resin on the intestine, it also contributes to the curative action, by the proportion of the resin formed at its expense.

Finally, notwithstanding the opinion of a few physicians, neither the essence nor the resin could replace the balsam, in the treatment of gonorrhœa. In reference to which the pharmacologist Jeannel* says: "It is difficult to oblige one to accept the artificial improvement for that which is naturally good (copaiba)."

For other affections besides vesical and urethral catarrh, the isolated use of the essence, which has especial action on the respiratory organs and the skin, is unnecessary, as the balsam generally contains a sufficient proportion of the essential oil to be employed in its natural condition against these affections.

Tested Copaiba.—Copaiba has been frequently found fault with on account of the uncertainty of its effects. However, most frequently it is not the copaiba which is to blame, but it is the carelessness with which (like many other remedies) it is selected. For there is no substance more variable in its composition than copaiba. Thus there are some copaibas containing but 30 per cent. of the essence, whilst others contain as high as 80 per cent.; besides which all the intermediate degrees may be met with. It may be easily conceived that copaibas rich in the essence would be excellent for the treatment of diseases of the respiratory organs and skin, as these two are the principal emunctories of the essence; but such copaiba can not be relied on in the treatment of gonorrhœa.

It is thus indispensable and important to make use only of *tested copaiba.* Unfortunately, pharmacologists have paid but little attention to this question; the pharmacist, also, indifferently admits into his pharmacy all kinds of copaiba, without taking note of the proportion of the resin and essential oil contained in each, which should be in the proportion of about 55 per cent. of the former, and of about 45 per cent. of the latter. This proportion appears to be the best, as it is sufficient for all the cases in which the balsam is made use of.* Would not our statement in reference to copaiba be equally applicable to nearly all the natural medicinal substances? Is not *testing* the most pressing reform necessary to introduce into our pharmaceutical code (?) that which should precede the most radical reforms, which consist in substituting the isolated chemical agents for the natural substances which contain them?

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*Jeannel: Article Copahu, Nouveau Dict. de Méd. et de Chir. Prat., publié par Jaccoud, Paris.

There are, in fact, two points to overcome before arriving at a complete realization of the positive tendencies of the science of medicine of the present day. As long as the chemical properties and the physiological effects of natural substances or of their components are but imperfectly known, it will be necessary to limit one's self in practice to the testing of those substances. Such should be the first step of rational therapeutics, which is that of the future. But this first stage will be of a much longer duration than many leading spirits imagine. Medicine, indeed, does not require revolutions engendered by exclusive systems, but only reforms resting on the solid basis of experimentation. Therefore it is only after having acquired a thorough knowledge of medicinal substances that it will be possible to substitute for each one of them the principle, or the immediate principles, which represent it in its useful effects. All our efforts, therefore, should tend toward this second point, already passed by a small number of medicinal agents. But above all let us not seek to forestall it by preconceived ideas.

Chemicocerebropathy.—That is what the good doctor calls it. We refer to a new system of medicine, which is to take the place of allopathy, homeopathy, and eclecticism. The good doctor is John Truman, M. D., of Cincinnati. His specialty is the feeding of the brain. His pamphlet is on the present status of the medical profession. We are glad to learn from the first sentence that "chemicocerebropathy is based on the law of the proper supply of brain material and other elements of the physical and mental organization of man, and in its scientific application reduces medicine to an exact scientific mode of cure."

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*We must say that, among the preparations of copaiba lately submitted to our examination, we have found one which evidently contains *tested copaiba* —it is *the gluten capsules of Raquin of Paris.* The analysis of the copaiba contained in these capsules almost invariably yielded about 55 per cent. of resin and 45 per cent of essential oil.

We are also delighted to learn that it has been established by "animal chemistry" that "the human brain with its phosphoric process is a working machine." After a sharp review of the prevailing medical systems, showing how they disintegrate the brain and destroy its normal power, we are informed that it is "not so with chemicocerebropathy. This system introduces the true doctrine of prescriptive sobriety, which is in accordance with the true doctrines of disease; and this is another proof that the true science of medicine dwells within the gates of brain protection, and that the claims of chemicocerebropathy are more than equal to all other systems of medicine, as the tendency of all these other systems is to deceive and demoralize mankind and entail habits which too frequently give the patient a quietus to a drunkard's grave."

Dr. Truman appears to have acquired the art of feeding the brain and strengthening that organ, and publishes certificates as to the success of his "new plan of brain nourishment," to the effect that he is "a genial gentleman of advanced ideas;" also that when in Indianapolis he was "diligently engaged in the duties of his profession, and has conducted himself in the most approved Christian manner, taking an active part in advancing the cause of Christ in our midst."

A Cincinnati gentleman testified that the "skillful administration of brain food" has been a great help to him, and a New Yorker writes: "I am about to open a water-cure for myself, and, with your permission, would be pleased to use your 'brain food.'"

The prospect of having brain food administered in Cincinnati in liberal quantities and upon scientific principles, may not be agreeable to medical practitioners generally, but we have little doubt that they must eventually yield to the claims of chemicocerebropathy, for that which is based upon a proper supply of brain material, and administered by one who conducts himself in "the most approved Christian manner," is evidently the science of the future. Why Indianapolis should have allowed the nutrition of the brain to be neglected and the emigration of the celebrated chemicocerebropathist himself, is the point that puzzles the will and confounds the understanding. It must, we presume, be attributed to the prevailing political excitement in that city, and the cultivation of the art of counting out obnoxious candidates for exalted offices.—*Commercial.*

Nitrite of Amyl in Spasmodic Asthma.—Dr. Duncan (*Michigan University Medical Journal*) reports three cases of spasmodic asthma in which he used nitrite of amyl with success. It was dropped on lint, in quantities varying from two to five drops. One or two inhalations were sufficient to afford immediate relief. Physicians can not be too cautious in the use of this agent, as dangerous symptoms sometimes supervene in from fifteen to twenty seconds.

Abortive Treatment of Small-pox.—Dr. Bessey (*The Canada Medical Record*) reports a number of cases of variola treated by carbolic acid, on the supposition that the disease is dependent upon "a particular disease germ." The following formula was used: "℞. Acid carbolic, ʒi; glycerine, ℥i; sodæ sulphitis, ʒx; aquæ, ad. ℥vi. Of this a dose proportionate to age of patient." When there was fever he used diaphoretics. To allay itching and destroy *germs*, carbolate of glycerine was used.

Nitrite of Amyl in Angina Pectoris.—Dr. Madden, of Torquay (*The Practitioner*, London), reports the successful use of nitrite of amyl in his own case. He has been subject for years to severe attacks of angina pectoris, having slight mitral incompetence. During his last attack, in July, 1871, he inhaled five drops of it; the result was wonderful. The doctor describes the effects in the following words: "The presence of intense pain is not favorable to the exercise of calm philosophic analysis, and I can only tell what I *felt*. The first effect was often bronchial irritation, causing cough; then quickened circulation; then a sense of great fullness in the temples and burning of the ears; then a violent commotion in the chest, tumultuous action of the heart, and quick respiration. The angina pain then died out first in the chest, next in the left upper arm, and last of all in the wrist, where it was usually extremely severe." There was no confusion of thought in the doctor's case. Sometimes, after taking the amyl, he suffered from transient headaches.

Locomotor Ataxia treated with Nitrate of Silver.—Prof. Dickerson (*Kansas City Medical Journal*) reports two cases of locomotor ataxia which, following the method of Prof. Wunderlich, he successfully treated with nitrate of silver. The medicine was administered in doses of one half-grain, taken after meals. Both patients recovered after about three weeks' treatment.

Veratrum Viride with Morphia in Pericarditis.—Dr. Lynch (*The Physician and Surgeon*, Baltimore) reports a case of pericarditis treated by veratrum viride, while the patient was under the influence of morphia. The interesting point claimed in this case is, that the entire control of the heart's action may be maintained by the veratrum, notwithstanding its antagonism with the alkaloids of opium.

Absolute Rest in Orchitis.—Il dottore Brambilla (*Gazetta Medica Lombardia*) reports a number of cases of orchitis, treated at the "Ospedale Maggiore" by Dr. Fiorani. Absolute rest was all the treatment used. In all of the twenty-two cases thus treated, the result was a success.

Arrest of the Destruction of Lung Tissue in Chronic Phthisis by Means of the Inhalation of Oxygenated Essences.—Dr. Jules Cheron (*Gazette Hebdomadaire*) reports the successful use of the oxygenated essence of camphor in a large number of phthisical cases. He claims to have produced "cicatrizations of cavities of the lungs in chronic phthisis." The following are some of his conclusions: "Preference must be given to the oxygenated essence of *Laurus camphora*, of which the odor is less penetrating than that of *Borneo* camphor, and to the oxygenated essence of cedar, the odor of which is agreeable and sweet and is very well supported by the patient." "An intense continued fever, great weakness, rapid progression of the disease, with emaciation, are contraindications for their use." "The slow form of phthisis, with partial conservation of strength, abundant expectoration, with cough and oppression, are the cases in which the best results are obtained." A simple apparatus resembling our ordinary spray producer is used, by means of which the vapor is projected toward the bronchia.

"*A Renegade.*"—Under this heading the "Philadelphia Medical Times" goes for the bowels of a certain Christopher C. Cox. "Christopher" is, or rather was, an *ex-vice-president* of the "American Medical Association." "Christopher," it seems, has been consorting with the *little pellets*, and becoming pregnant with Hahnemannic ideas, dropped a still-born one before the "American Institute of Homœopathy!!!" The little fœtus dropped by "Christopher" was duly admired by the homœopaths; "Christopher" is now in full communion with the *sugar drops* and is happy, but the "Philadelphia Medical Times" is unhappy. If a few more such members of the regular profession, who feel like "Christopher," should leave it, we should be better off as a medical body. "Christopher" evidently has an itching for notoriety; in this line he has achieved a homœopathic success·

New Words.—In a communication to the "*St. Louis Medical Archives*," from a certain Dr. Brey, the learned doctor proposes to substitute the term "porniatric hospital," for "social evil hospital." Let us use the "doctor's" own words: "Thus, as from the Greek 'lukeion' (*lukeion*) we have lyceum, so from the Greek 'porneion' (*porneion*) brothel, we may say porneum, and instead of the lengthy and really meaningless expression 'social evil hospital,' I would propose the short and expressive one 'porniatria,' or 'porniatric' house or home, or, if you please, 'porniatric hospital,' from the Greek 'porne' (*porne*) prostitute, and the word 'iatros' (*iatros*) physician or healer, leaving it to linguistic judges and to the profession whether either of them is worthy of adoption." Now we are not much on philology, but we object to the *connection* of *porne*, prostitute, with *iatros*, a physician, it would be wrong. How would it do to call a quack a porniatrical scamp???

Treatment of Uterine Hemorrhage by Sulphate of Quinine.—In a little monograph by Dr. Bartharez, recently published in Paris, the use of quinine in passive uterine hemorrhages is warmly advocated. The author claims that quinine diminishes the caliber of the smaller capillaries through the medium of the nervous system. The quinine acting upon the heart diminishes its actions; it also produces muscular contraction of the fibers of the uterus.

Wanted—A Social Evil Enactment.—The following table taken from *Lecour's* new book, "La Prostitution a Paris," certainly gives one a clear idea regarding the sanitary benefits conferred by a "social evil" enactment:

In 1791, one prostitute out of every nine had syphilis; 1816, 1 to 13; 1818, 1 to 36; 1819, 1 to 43; 1820, 1 to 45; 1855, 1 to 43; 1856, 1 to 36; 1857, 1 to 40; 1858, 1 to 50; 1859, 1 to 63; 1860, 1 to 65; 1861, 1 to 87; 1862, 1 to 82; 1863, 1 to 73; 1864, 1 to 88; 1865, 1 to 93; 1866, 1 to 137.

The above-named figures are sufficient to show the immense good effected by a periodical medical inspection of the *demi-monde.*

Premeditated Insanity versus Premeditated Murder.—Bret Harte in a recent story, entitled "Mrs. Skaggs' Husbands," makes a capital hit at the burlesque murder trials, so common at the present day. Law and physic are *slightly* cauterized in the following:

"'A glass of wine with you, Mr. Johnston;' and he fills his glass and I fills mine, and we rises. And I heaves that wine-glass and all, right into his damned grinnin' face. And he jumps for me, for he is game, this man, very game. But some on 'em grabs him, and he sez, 'Who be you?' And I sez, Skaggs! damn you, Skaggs! Look at me! Gimme back my wife and child, gimme back the money you stole, gimme back the good name you took away, gimme back the health you ruined, gimme back the last twelve years! Give 'em to me, damn you, quick, before I cuts your heart out!' And naterally, Tommy, he can't do it. And so I cuts his heart out, my boy; I cuts his heart out."

The purely animal fury of his eye suddenly changed again to cunning. "You think they hangs me for it, Tommy, but they do n't. Not much, Tommy. I goes to the *biggest lawyer* there, and I says to him, 'Salivated by merkery—you hear me—salivated by merkery.' And he winks at me and goes to the judge, and he sez, 'This yer unfortnet man is n't responsible—he's been salivated by merkery.' And he brings witnesses; you comes, Tommy, and you sez ez how you've seen me took bad afore; and the *doctor*, he comes, and he sez as how he's seen me frightful; and the jury, without leavin' their seats, brings in a verdict of justifiable insanity—*salivated by merkery.*"

There is as much of a point and moral in this story, as there was in the one of the "*Heathen Chinee.*" While we think that the mission of the physician is to *save life*, we believe there should be exceptions to the rule. The *insanity dodge* of *medico-legal* experts is about played out. The killing of a dozen or so of doctors by some of *these insane people* would be a blessing to the country, and would bring the profession to their senses.

Obstetrical Paralysis of the Newly Born.—Two cases of obstetrical paralysis of infants, observed by M. Nadaud at the *Clinique d'Accouchement* of the Faculty, have given him the idea to study this affection. Other very numerous cases, communicated by M. Duchenne (of Boulogne), Tarnier, and Parrot, have permitted him to finish his work.

Paralysis of the face and paralysis of the upper extremities are successively described. Each one of these paralyses is divided into three varieties, which are: Spontaneous paralysis, paralysis due to the application of forceps, paralysis due to the maneuvers of the accoucheur.

Among the paralyses of the face, those of the facial nerves are common; their diagnosis is easy, their prognosis favorable, for in the majority of these cases they recover rapidly. The application of forceps, can it determine the paralysis of the motor oculi communis nerve? Two notes, unfortunately too brief, communicated by the author, appear to indicate it. Then comes paralysis of the upper extremities, which are much less rare than is generally believed. The prognosis of these cases is unfavorable. Electricity should be immediately used in all these cases.—*Revue Photographique des Hôpitaux de Paris.*

Death of a Celebrated Pharmaceutist.—Adolphe Georges Guillemette, a celebrated Parisian pharmaceutist and chemist, died recently, aged 64 years. M. Robiquet and Guillemette were related by marriage. Robiquet was the father-in-law of Guillemette. He was author of numerous articles relating to various preparations of the materia medica. If we are not mistaken, Guillemette at one time published an elaborate article in reference to the Tonka bean. He leaves two daughters to mourn his loss.

The Decline of Chivalry.—In a review of an article written by Dr. Rogers, of New York, entitled "Corruption of Medical Colleges," Dr. Gaillard, of Louisville, takes occasion to again "go for" Dr. Yandell in the following foot-note: "*Note.*—Dr. Rogers should take a double comfort: first, in regard to society action. As imbecile and cowardly as was the action of the New York Academy of Medicine in regard to his charges, he will find that body brave and decisive when compared with the Kentucky State Medical Association at its last meeting; for when charges were preferred against Dr. D. W. Yandell, a member of that body, and a resident of this city (Louisville), for the commission of *acts disgraceful to a man, an officer and a physician, etc.*" [Italics our own.] Ten years ago, this would have been considered as *posting* a man (in Kentucky), now, it seems as though "ink-slinging" has taken the place of the *code.* Although we disparage duelling as a general rule, in this case we deem it advisable. For months past, this quarrel has been kept up; the medical world are about tired of it. We ask both the learned professors to finish this matter according to the old style. Although loth to part with either of them, still the death of one of them is necessary to secure this highly desirable end: "Let us have peace." Let this duel take place on *highly scientific principles.* Go some pleasant morning to the woods back of Louisville, each prepared to take the other's life with a hypodermic syringe; let one use* a concentrated solution of strychnia, and let the other use arsenious acid. The man falling first dies, the other has an antidote administered by his second; honor is satisfied; the world is at peace. We should be happy to receive "cards" to the funeral festivities of either Drs. G. or Y.

Digitalis an Anaphrodisiac.—M. Gourvat is publishing, in the *Gaz. Med. de Paris*, a series of papers on the action of digitalis. In a late number (Dec. 23, 1871) we find the following: "When digitalis or digitaline is administered for some time to a man in full possession of sexual powers, the latter become gradually weakened, the propensities disappear, the liquor seminis diminishes by degrees, and may at last vanish altogether. These results are explained by the antiplastic and lowering action of digitalis. The antiphlogistic properties of the drug are the secret of its good effect in spermatorrhœa. With women, digitalis and digitaline excite strong, regular, and intermittent uterine contractions, and control metrorrhagia; hence digitalis is employed in exciting abortion (Tardieu). It is probable that digitalis acts as an anaphrodisiac in women also, inducing, by long-continued use, impotence and sterility. In men it hinders the secretion of the liquor seminis, and in women it may interefere with the development of the Graafian vesicles, the propagation of the species being thus doubly retarded."—*Lancet, Jan.* 13, 1872.

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* Refer to Bartholow's "Manual of Hypodermic Medications."

Editorial.

Our congratulations are once more extended to the readers and friends of the LANCET AND OBSERVER, as again we enter upon the pleasant intercourse of another year. Before this number reaches you the pleasures and festivities of the holiday season will have passed, and, as we trust, the season has been not only one of grateful, social intercourse between our medical brethren and their patients, but a season of substantial acknowledgment for services rendered. At any rate, we will all cultivate brave hearts for another year's work, and earnest purposes for dutiful labor in our several fields. We hope to make this journal an acceptable friend and welcome visitor to the doctor's table. To this end we shall use all due diligence, and expect the hearty co-operation of the profession everywhere and in all ways. Beyond this we have little to promise; so many years in the past will doubtless be a reasonable guaranty for the future. We will only say that for the year upon which we now enter, we have made such arrangements of our affairs that we expect to give more time and attention to both the editorial wants and the business details of the journal than heretofore, and in all its departments to improve, if possible. So once more, we wish all our friends a happy new year.

Personal.—The undersigned has been elected to the chair of Materia Medica in the medical department of Syracuse University. The appointment is accepted under certain conditions, and I shall be absent from this city in the performance of its duties during January and February. The acceptance of this chair was, perhaps, a matter of unwise pride, and is partly a matter of experiment. During my absence from the city satisfactory arrangements are made for conducting this journal, the editorial care being chiefly placed in the hands of my very competent friends, Prof Kearney and Dr. Minor. With them I feel that the work will be entirely satisfactory.

EDWARD B. STEVENS.

An Explanation.—A recent number of the "*Clinic*," of this city, contains a complaint of a want of courtesy on the part of exchanges in using its matter without the usual acknowledgment. As it is understood that, in part, this complaint is intended to apply to us, we rise to make the *amende* that "Cæsar" ought to require Upon several occasions our application to the secretary of the Academy of Medicine for access to the records for publication, has been responded to that the reports in the *Clinic* are essentially his, and requesting us to print from that. If, however, our neighbor feels grieved we cheerfully make this statement, and should we find further use of the *Clinic* reports convenient for our purpose, shall instruct our printer to make the credit. Sometime ago we used a report read before the State Society, that although furnished to us by the author, also appeared in the *Clinic*. The absurd claim was also made in that case that we had appropriated its matter. We confess in that case we were too dull to see our fault. So far as we know, this is the extent of *our* offending. We have neither the wish nor interest to treat our exchanges with editorial discourtesy.

Autenreith.—We are greatly pleased to note some handsome improvements in the arrangements of Autenreith's instrument store. New cases of black walnut have taken the place of the old shelving, well filled with a great variety of material. Our readers will find William very ready to show his goods, and we are gratified that his enterprise is making so good a trade.

Schultz & Negley have possession of the old drug-store on the corner of Fifth and Main. A large number of patrons know this well enough, but as some oversight of the printer had dropped their card from our advertisements, some might infer that the firm had retired with success and wealth. Mr. Negley wants it understood that the same attractions exist, and that, as heretofore, physicians will have their orders filled with accuracy and dispatch.

Godey's Lady's Book.—Age does not impair the energy of our old friend. January is on our table, fresh as ever, and not to be outdone by any rival. Every subscriber for 1873 will receive a chromo, entitled "*Our Darling.*" Price, $3 a year, or with LANCET AND OBSERVER, $5.50.

Scribner is on our table. We would advise those of our readers who have not yet completed their list of periodicals to add *Scribner's.* Dr. Holland's story alone promises to be worth the year's subscription.

Dr. George Mendenhall, of Cincinnati, Ohio, Professor of Obstetrics in the Miami Medical College, has been elected a "Fellow of the Royal Obstetrical Society" of London. Prof. Mendenhall is now at Wiesbaden, resting from his professional labors.

An Apology.—We owe an apology to our many readers for the delay in the appearance of this month's magazine. The paper on which our journal is printed was delayed on its way from the "East" by the late heavy snows.

Reviews and Notices.

A Manual of Qualitative Analysis. By Robert Galloway. Philadelphia: Henry C. Lea. 12mo, pp. 402. A reprint from the second English edition.

This is one of the very best text-books in the market. We know, by experience, that a student who masters its contents becomes self-reliant in the processes he pursues, and can adapt his methods to his circumstances. It is not so well adapted for a reference book, but it is worth more than its price for the presentation it gives of the famous "flame reactions" of Bunsen. Physicians will find it of use in its analysis of organic substances, which includes the more common topics of animal chemistry (the urine, urinary calculi, etc.), and a brief consideration of the alkaloids. It has also this great advantage, it may be used without a teacher.

For sale by Robert Clarke & Co. Price, $2.50. N.

A Treatise on Diseases of the Nervous System. By W. A. Hammond, M. D., Professor in Bellevue Hospital Medical College, etc., etc. Forty-eight illustrations. Third edition. "Est quodam prodire tenus, si non datur ultra."—*Horace.* New York: Appleton & Co., 1872.

Only about one year ago we gave a full *critique* of the book before us. At that time we had occasion to make some strictures that we regarded as well taken. At the same time we now, as always, take occasion to recognize the scholarship of Dr. Hammond, of which the present volume is a sufficient token. The work having gone to this, the third edition, the critic can scarcely, with propriety, be harsh; and we are free to say that, as a work of reference, our readers will find the book of value, and in many respects wonderfully suggestive as to the therapeutics of these diseases.

For sale by Robert Clarke & Co. Price, $3.

The Pathology, Diagnosis, and Treatment of Diseases of Women, including the diagnosis of pregnancy. By GRAILY HEWITT, M. D., London, F. R. C. P., Professor of Midwifery, etc., etc. Second American from third London edition. One hundred and thirty-two illustrations. Philadelphia: Lindsay & Blackiston, 1872.

One of the former editions of this book was noticed in this journal, and we shall only now take the opportunity to say that this new edition is remarkably full, and affords instruction in every department of the science and art of gynecology. The topics embraced in the volume cover the whole ground of sexual disorders, and our friends will find this one of the best works for their consultation.

For sale by Robert Clarke & Co. Price, $5.

A System of Oral Surgery. Being a consideration of the diseases and surgery of the mouth, jaws, and associate parts. By JAS. E. GARRETSON, M. D., DD. S., Oral Surgeon, etc. Illustrated with numerous wood-cuts and steel plates. Philadelphia: J. B. Lippincott & Co., 1873.

The beautiful book before us will be equally acceptable to the physician and the dentist. The earlier chapters are devoted to the consideration of matters pertaining to the anatomy and physiology of the mouth and face; then we have a variety of surgical diseases pertaining to these parts, well and carefully treated. The various artificial appliances of use in defects of the mouth are very well described and illustrated; so, too, various local diseases, as of the tongue, are treated of with clearness. The operations for tumors about the mouth are described, as also various thin plastic operations. The work is profusely illustrated in all its departments, and in every way well gotten up. All our readers interested in mouth surgery of any sort will find this book full of valuable matter.

For sale by Robert Clarke & Co. Price, $10.

The Microscope and Microscopal Technology. A text-book for physicians and students. By Dr. HEINRICH FREY, Professor of Medicine in Zurich. Translated from the German by GEO. R. CUTTER, M. D., Clinical Assistant to the New York Eye and Ear Infirmary. New York: Wm. Wood & Co., 1872.

This carefully-prepared book occupies a large portion of its introductory chapters in the explanation of the nature, mechanism, uses, of the microscope, together with the modes of making preparations and objects, injecting, mounting, arrangement of microscopic objects. Subsequent chapters treat of the microscopic examination of a great variety of secretions, growths, and structures; blood, pus, etc.; hair, cartilage, bones, and teeth. Indeed, all the structures to which we desire to direct our study, are placed under consideration in these chapters. The microscopical student will find this book a great help in these investigations. It is well printed, and very abundantly illustrated.

For sale by Robert Clarke & Co. Price, $6.

Lessons in Physical Diagnosis. By ALFRED L. LOOMIS, M. D., Professor of Institutes and Practice of Medicine in the University ot New York. Third edition. New York: William Wood & Co., 1872.

We have heretofore noticed, with some fullness, the book of which a new edition is just before us. The present edition is a great improvement in the character and fullness of former editions. Indeed we may say, in brief, Dr. Loomis has afforded us exactly what it purports, a complete and instructive guide to physical diagnosis, and all medical gentlemen desirous of an excellent guide can do no better than procure a copy of this work.

For sale by Robert Clarke & Co. Price, $3.

A Practical Treatise on Urinary and Renal Diseases, including urinary desposits. Illustrated by numerous cases and engravings. By WILLIAM ROBERTS, M. D. Philadelphia: Henry C. Lea, 1872.

The first edition of Dr. Roberts' work appeared in 1865. It was then regarded as a valuable contribution to the pathology and therapeutics of urinary disorders. In this new edition the author has thoroughly revised the whole work; indeed, every chapter appears to have been rewritten. The topics especially considered are as follows: The physical and chemical properties of the urine; urinary diseases; organic diseases of the kidneys. To the general practitioner a very interesting feature of this work is the large number of illustrative cases which are incorporated with each chapter, making the work not only didactic in its general character, but, to a large extent, clinical in its details.

For sale by Robert Clarke & Co. Price, $4.50.

Dr. Bigby's Obstetric Memoranda. Fourth edition revised. By Alfred Meadows, M. D. Philadelphia: Lindsay & Blackiston, 1872.

Dr. Rigby's little book is the very briefest little manual of obstetrics, and would answer a capital purpose to slip in the pocket and read while waiting the tedious hours of a first confinement.

For sale by Robert Clarke & Co. Price, 50 cents.

Clinical Lectures on Diseases of Women. By Lombe Atthill, M. D., University of Dublin, etc., etc. Second edition, revised and enlarged, with six lithograph plates and wood-cut illustrations. Philadelphia: Lindsay & Blackiston, 1873.

We have read Dr. Atthill's book with great satisfaction; and while, perhaps, there is not a great deal of fresh or new matter, still it will afford the current views and practice of the profession in small compass.

For sale by Robert Clarke & Co. Price, $2.25.

The Treatment of Syphilis, with subcutaneous sublimate injections. Ry George Lewin, Berlin. Translated by Carl Boeggler, M. D., and E. H. Gale, M. D. Philadelphia: Lindsay & Blackiston, 1872.

The chief interest of this little monograph, and its purpose, is to exhibit the value of subcutaneous injections of bichloride of mercury in the treatment of syphilis. Price, $2.25.

Married.—Hare—Hurst—At the residence of Mr. John Abernethy, the bride's brother-in-law, on Tuesday, December 10, 1872, by the Rev. Z. W. Fagan, D. H. Hare, M. D., of Goodhope, Fayette county, Ohio, to Miss Lizzie C. Hurst, of Chillicothe, Ohio.

Sheldon—Hockett—December 25, 1872, at Five Mile Christian Church, by Rev. B. F. Rapp, Dr. S. B. Sheldon, of Five Mile, Ohio, to Ruth Hockett, of Westborough, Ohio.

Bingham—Scott—At the same time and place, Dr. J. H. Bingham, of Buford, Ohio, to Mary E. Scott, of Five Mile, Ohio.

Died.—W. C. Bracken, M. D., died at his residence, Jersey, Licking county, Ohio, October 19, 1872. He was much esteemed in the community, both as a skillful physician and as a useful citizen.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

VOL. XVI.—FEBRUARY, 1873—NO. 2.

Original Communications.

Art. I.—Rupture and Aneurism of the Heart.

A Report from the Pathological Section of the Cincinnati Academy of Medicine. By N. P. DANDRIDGE, Pathologist to the Cincinnati Hospital.

The following report which I beg leave to offer to the Academy, is based upon a specimen taken from a patient who died at the Cincinnati Hospital, and whose history I take from the clinical records:

Nancy Tait, colored, aged thirty, married, domestic; entered the service of Dr. Young, May 4, 1872. She states, that at the age of twelve a sore appeared on the anterior part of right ankle, which suppurated and discharged a great deal through the spring and summer, but which was much better during the winter. The left leg was not affected until last summer, at which time a sore, similar to the first, appeared. Two months ago she had an enlarged cervical gland which suppurated. Mother died of paralysis; father of an unknown disease, and one brother and sister of consumption. One sister had been affected similarly to herself, but was now well.

Physical Condition.—Woman of medium size. One enlarged gland and several old cicatrices found in the cervical region; one gland on left side indurated; feet and legs swollen and inflamed, discharging a sanious pus. There is an eruption extending over most of the body. Appetite good; bowels constipated; menses absent for the last two years.

May 8. Unchanged.

May 30. Greatly improved and able to sit up.

June 4. Called this morning at six A. M., and found the patient dead, she having expired almost instantly.

Autopsy, ten hours after death.

Post-mortem rigidity pretty well marked; body well nourished; numerous scars on body, arms, neck, feet, and legs.

Section.—The lower border of the liver was found to be one inch below the ensiform cartilage in the median line. The uncovered pericardium measured seven inches by three and a half, and extended two and a half inches to the right of the median line. Pleuritic adhesions were found everywhere over both lungs. The cavity of the pericardium contained ten ounces of clotted blood. The heart measured six by four and a half inches, and was covered by a thick layer of fat beneath the pericardium. At the apex of the left ventricle, a sac-like prominence was seen, one and one-fourth inches in diameter, the walls of which were quite thin. At the most prominent part, which is also the thinnest, was a small opening, capable of admitting the point of an ordinary probe. This opening communicated through the sac with the cavity of the left ventricle. To the left, and forming the external wall of the sac, there was an indurated mass about one and a half inches in its antero-posterior diameter, by three-fourths of an inch in its transverse.

Upon section, this tumor was of a dark purple color, with occasional lines of a lighter hue traversing it, and was sharply defined from the surrounding substance of the heart. The rest of the sac was so thin that where the probe was passed into its interior, it seemed to be covered only by the pericardium and its fat. The opening into the ventricle was small, and was hidden among the trabeculæ. The endocardium showed some atheromatous patches near the base. The microscopic section of the tumor at the apex showed a wavy fibrous structure. The muscular tissue from the wall of the ventricle was extremely fatty; the transverse markings could be nowhere seen, and the fibrils broke with irregular, jagged ends.

Brain and Lungs normal.

Kidneys.—The left measured five and a half by three inches, and weighed eight ounces. The capsule easily detached; surface smooth beneath, with injection of the stellate veins. On section the kidney was lighter than normal, particularly the cortical substance. The inter-pyramidal substance was increased to such extent that the pyramids could scarcely be seen in places.

The right kidney measured five by two and a half inches, and weighed five ounces, and was similar to the left.

The microscopic examination revealed an advanced stage of fatty degeneration.

Liver.—The transverse diameter, twelve inches. Antero-posterior diameter of the right lobe, ten inches, and of left, six and a half inches; color darker than normal, substance soft, and of a dark chocolate.

Uterus and Ovaries.—Two cysts were found, one in each ovary.

We have here the history of a patient, undoubtedly affected with syphilis, whose death was caused by the rupture of an aneurism of the heart. Forming part of the sac of the aneurism a tumor was found, which I regard as a syphilitic gummy tumor. This view is confirmed both by the microscopic, as well as macroscopic appearance, and further strengthened by the syphilitic history. The tumor I regard as the first formed, and by its partial softening so weakened the walls of the heart at that point as to give rise to the formation of the aneurismal dilatation. Three cases, in which gummy products have occasioned the formation of cardiac aneurism, and which have presented conditions more or less similar to the one under consideration, I find recorded by Lebert, Virchow, and Oppolzer. The foregoing case naturally suggests three lines of investigation—rupture, aneurism, and tumors of the heart—to which I wish briefly to call attention.

And first, in regard to rupture of the heart, or what has been termed spontaneous rupture, meaning thereby to exclude those cases in which the cardiac walls have been penetrated by wounds. Dr. Barth, physician to Hotel Dieu, in Paris, has contributed an article upon the subject of spontaneous rupture of the heart, in the Archives Generales de Medicine for 1871, in which he analyzes twenty-four cases, the entire number which are recorded in the transactions of the Anatomical Society of Paris, during forty years, a society before which the most interesting specimens are always presented. Of these cases seven were men and seventeen women. This discrepancy, however, is somewhat accounted for by the fact that most of the specimens were drawn from hospitals dedicated to the diseases of old age. The Salpetriere, which is used exclusively for women, is within the city and easily accessible, while the Bicetre, in which men alone are received, is more distant, so that many more pathological specimens are shown from the former than the latter.

With the exception of two, the rupture in every case occurred in persons over sixty years of age. In twelve cases, in which the previous health was noticed, three were in good health, the rest had suffered more or less with cardiac symptoms, such as oppression, palpitation, vertigo, and occasional attacks of syncope. Among the immediate exciting causes a full meal is noted in one—a cup of brandy and coffee in one—while five were attacked during the act of defecation.

In the great majority of cases, death was immediate. Two, however, survived for some little time, one being unconscious for half an hour before death, and the other an hour and a half. In all of the cases, the cavity of the pericardium contained clotted blood, varying from six to fifteen ounces; and in one case the quantity was estimated as over two quarts. In twenty-two cases there was a single rupture; in one there were two external openings, communicating, however, by only one with the ventricle; while in the remaining case, there was one internal and three external openings.

All of the ruptures occurred in the left ventricle, nine were in the middle, four near the base, and eight at or near the apex. In three, the exact locality was not stated. In twenty cases the extent of the rupture was estimated from one to three centimetres. In eight cases, in which the fact was noted, four presented the largest aperture on the ventricular surface, three on the pericardial, and in one the two were equal. In some, the line of rupture was direct; in some, sinuous, and in one there was a cavity in the substance of the wall, which was filled with clotted blood. Of the condition of the walls of the heart, in one alone were they said to be healthy, and in this case the coronary arteries were ossified, and there was a constriction above the iliac bifurcation of the aorta. For the rest, there was noted ecchymoses, interstitial hemorrhage, thinning of the walls, hypertrophy, and softening, variously described as friable, fragile, etc. Fatty degeneration was the most constant change noted; the fat covering the heart as a thick layer beneath the pericardium, or disintegrating the muscular fibers as shown by the microscope. Pericardial adhesions were not seen in the whole series. In four cases the left ventricle was hypertrophied, and in two hypertrophied and dilated. There was one example of stenosis of the mitral valve, and four times ossification with stenosis or insufficiency of the aortic valves. In some cases the aortic was noted as dilated, atheromatous or calcareous, and in one there was contraction above the bifurcation. From these cases, M. Barth concludes that the most constant changes which accompany rupture of the heart are fatty degeneration and interstitial hemorrhage, but also includes, as more rarely observed, aneurism, ulceration of endocardium, abscess of the wall of ventricle, and hydatid cysts. Underlying all these changes, he sees the nutrient arteries of the heart affected, giving rise to interstitial hemorrhage, atrophy by lack of nutrition, and degeneration of the muscular tissue. That the rupture is sudden and complete, in the great majority of cases, and that death follows instantly, can not be doubted; but in some few there seems to be reason to believe that the lesion is not accomplished at once, or at least that the fatal termination is somewhat delayed. Thus changes have been observed in the border of the wound, which time alone could affect. In one case while the greater part of the blood found in the pericardial sac was soft and evidently but recently coagulated, there was a layer covering, the heart more highly organized, and which from the history of the case had been probably the result of a hemorrhage occurring a day or two previous to the fatal rupture. This is likewise confirmed by the symptoms, for in some cases the fatal attack has been ushered in by sudden and great dyspnœa, or excessive pain in the precordial region; while in two cases syncope lasted in one, half an hour, and in the other an hour and a half before death. The immediate cause of death, M. Barth regards as the interference with the action of the heart by the rapidly increasing pressure from the blood accumulating in the pericardial sac.

Bouillaud has suggested, and Rokitansky seems to consider the suggestion as at least plausible, that the cause of death really is the complete anæmia of the brain caused by the sudden emptying of the left ventricle. In addition to the twenty-four cases reported in the above article, I find recorded in the Transactions of the

Pathological Society of London twenty-three cases which bear out the general conclusions of M. Barth, but which also present some striking exceptions.

Thus in nineteen cases the left ventricle was the seat of rupture; in two the septum and right ventricle, and in one the right ventricle alone, while the left auricle was once affected. To this case I shall have occasion further to allude. In nineteen cases fatty degeneration of the muscular fibers was noted as present; in one, interstitial hemorrhage in the wall of the left ventricle, and in one atheroma of the endocardium. In all but one the patients were advanced in years. The single exception was a specimen presented by Ogle and recorded in volume 14 of the Transactions. This is the case spoken of above, in which the left auricle was affected, and, so far as I have been able to find, stands unique. It was from a girl twelve years old, who was recovering from scarlet fever. In this case there was atheromatous patches in the endocardium. Barth alludes to a collection of fifty-five cases, made by a M. Elleaume, in which the rupture occurred forty-eight times in the left ventricle; in three in the right auricle; in two in the right ventricle, and in two in the left auricle. This paper I have been unable to find, and do not know what further deductions were made from the cases.

Combining these three series together, we find that out of one hundred and two cases, the rupture occurred ninety-one times in the left ventricle, three times in the left auricle, four times in the right ventricle, twice in the septum and wall of right ventricle together, and twice in the right auricle. These considerations justify the conclusions that with rare exceptions spontaneous rupture of the heart affects those of advanced age; that its seat is the left ventricle, and that fatty degeneration of the muscular tissue is the pathological change most constantly present and upon which the rupture depends. Aneurism of the heart is described by all systematic writers on cardiac pathology. Rokitansky, who quite fully discusses the subject, makes the division of acute and chronic.

In the first there is always a destruction of the endocardium, together with more or less of the underlying muscular tissue, so that the aneurismal sac is only composed of part of the coats which normally form the walls of the heart. This form he compares to false aneurism of the arteries, and it is always accompanied by more or less evidence of a previous endocarditis. The second or chronic form is found in those cases in which there has been no solution of continuity, either of the endocardium, the muscular tissue, or pericardium. These cases are always due to myocarditis or inflammation occurring in the muscular substance of the wall, and affecting the adjacent endocardium and pericardium. This inflammation gives rise to the production of a cicatricial tissue in place of the true muscular elements, and following the law observed elsewhere in regard to inflammatory tissue, this undergoes contraction; this contraction produces a depression in the wall of the heart, or a circumscribed dilatation of the ventricle at that point. This depression or dilatation enlarges more and more under the force of the blood stream; the cardiac wall grows constantly thinner, and finally is bulged out and presents the appearance of an appendage or tumor upon the pericardial surface.

Here we have the sac formed of all the parts of the heart walls, changed, indeed, by the inflammatory action, but nowhere presenting any solution of continuity. These cases are analogous to the true aneurism of the arteries, in which there is dilatation of all the coats. The dependence of this form upon a preceding myocarditis gains in probability from a consideration of the general course of inflammation in other muscles, and from the fact that the left ventricle, which is by far the most frequent seat of aneurism, is also almost exclusively affected by an interstitial inflammation. The size of the aneurism is from that of a pea, forming merely a depression in the wall, to that of an orange or fist. The ventricular opening may be as wide as the widest part of the sac, or contracted and small. It may contain coagula, and also layers of fibrin deposited as in arterial aneurism. The possibility of an abscess opening into the ventricle, giving rise to aneurism, is discussed by Rokitansky, but in no case has he found these conditions to exist. Rupture is comparatively rare. The sac may become adherent to the pericardium, or even ulcerate through and become attached directly to the thoracic wall.

This description of Rokitansky agrees very nearly with the conclusions arrived at by Mr. Thurman, who has published the result of his analysis of seventy-four cases of cardiac aneurism in the Medico-Chirurgical Review, 1838.

These were divided as follows: In 58 cases, in which there were 67 distinct aneurisms, the lesion was in the left ventricle; in 52 of these cases there was a single aneurism; in 4 cases there were 2, and in 1 there were 4.

The left auricle was affected 11 times, and the remaining 5 were cases of so-called aneurism of the valves. Thurman explains the reason that the left heart alone is affected, by the fact that the blood pressure is there much the greatest, and also that as the left heart is the center of the arterial system while the right is the center of the venous, it is but just to conclude that the former would be affected by those causes predisposing to aneurism in the arteries, and this is really confirmed by observation. Out of the 67 aneurisms observed in the left ventricle, and occurring in 58 different subjects, there were 35 which occasioned a decided prominence on the pericardial surface. In 19 there was no such prominence, while in the remaining 13 the condition of the specimens when examined was such as to render it a matter of doubt. In 19 cases the opening into the ventricle is described as wide, and in 25 contracted. The apex was the seat of the disease in 27 cases; in 21 it was found near the base, while the lateral wall contained 15 and the septum 3. Of those situated near the base, 4 opened into both ventricle and aorta. In 15 cases the sac was composed of muscular tissue and pericardium; of endocardium and pericardium in 4; and in 25 all three entered into its composition. In 9 cases the wall of the sac was found partly cartilaginous or somewhat ossified. In 27 cases there were pericardial adhesions, though in 20 of them the adhesions extended only over the sac, which was always described as small. None of these ruptured into the pericardial sac. In one case the sac was adherent to the pericardium, and rupture having occurred, the contents of the aneurism was discharged into the pleura.

In 12 cases the endocardium was diseased; in 9 the muscular substance is described as having undergone a fibrocellular degeneration. Disease of the valves is described as present in 12 cases; 8 were contraction of the mitral, 3 of the aorta, and 1 of both of these. In 10 cases only no lesions are spoken of. Out of 40 subjects in which the sex is mentioned, 30 were men and 10 women. In 35 cases the age is given—1 under 21, 16 from 21–50, and 18 over 50. Out of 17 cases, the profession was that of a soldier in 8. The exciting cause was variously described; an outburst of anger, a blow on the chest, a military flogging; and in the case of the celebrated tragedian Talma, to the efforts made during a piece of passionate acting. The case of a nobleman is detailed, who, during an outburst of anger, felt a sudden sharp pain in the precordial region, followed by cardiac symptoms. His death occurred in ten days, and an aneurism was found near the apex of the heart. In most of the cases cardiac symptoms were very vague or entirely absent. In those cases in which auscultation had been practiced, the signs were those of valvular disease. Death occurred three times from syncope, eight times from rupture, four from apoplexy, and once from epistaxis. In the 11 cases in which the lesion was seen in the auricle, the mitral opening was stenosed in all. Mr. Thurman gathered these cases from specimens in the London museums, and, as many were very old, it was impossible to find complete histories for many of them.

The case presented here to-night corresponds with the general deductions above given. The left ventricle is the seat of lesion, and the endocardium and muscular walls are both diseased. The accident of rupture is, however, spoken of as rare by both Rokitansky and Thurman. The existence of a tumor at the side and forming part of the aneurismal sac is more unique, and I have found no similar case recorded by Thurman, though a few similar cases are given by other authors, to which I shall presently allude.

The length this paper has already reached precludes the possibility of discussing in a general way the different forms of tumors seen in the heart, so I shall only give that which is *apropos* to our present case. The tumor I regard as a syphilitic gummata, and am strengthened in this view by the fact of active syphilis being present. Lanceraux, among syphilitic lesions of the heart, mentions a diffuse myocarditis and gummy tumors. Of the latter he has seen eight examples, two of which were in the wall of the left ventricle. I have found three cases in which aneurism has been caused by gummy tumors. One by Lebert I have been unable to find the history of. In volume 14 of the Archives, Virchow describes a case in which, besides the tumor, there was a general myocarditis, with endocarditis and pericarditis, and, in addition, lesions of the liver, referable to the same disease, were also found. The remaining case is by Oppolzer, and is recorded in Schmidt's Jahresb., 1860. Here the aneurism would only contain a bean, and had been developed by the softening of a gummy tumor, which breaking through the endocardium opened into the ventricle. The patient died of embolism of the brain. That syphilitic tumors should give rise to aneurism is readily explainable from the fact that they are prone to undergo softening in the form of a so-called caseous degeneration.

Art. II.—Hydrometra—A Rare Case.

By GEO. E. WALTON, M. D., Cincinnati.

The malady known as hydrometra, unaccompanied by pregnancy, is exceedingly infrequent; so much so that at the beginning of this century it was considered a medical myth by some authors. Naegle and Stolz* denied the possibility of its occurrence, and gave various reasons for their conclusions; among others, that no authentic case of the disease had yet been recorded. And an American writer† of considerable repute, in a work issued in 1859, says: "Now, as to hydrometra, I do not believe in it. It is indifferent to me who has seen it, or who has heard of it, I repeat, I do not believe in such a malady, and, therefore, I was disposed to pass it over in silence." Then follow several paragraphs intended to show its impossibility, and attributing all cases so denominated to the presence of hydatids. Such dogmatic language is in forcible contrast with that of the distinguished pathologist Grisolle. He says: "To this accumulation of serosity has been given the names *hydrometra*, *ascites*, or *dropsy of the uterus*, a disease excessively rare, but of which the existence appears to us established by incontestable facts."‡

But these conclusions seem to have been anticipated some years by Hippocrates.§ He says: "And further the women appear to be with child, and when the time of parturition arrives, the fullness of the belly disappears, and this happens from dropsy of theuterus."

What is *true hydrometra?* Churchill says: "This disease (hydrometra) consists essentially in the excessive secretion of fluid and its accumulation in the uterus, in consequence of the obliteration of the canal through the cervix, or the closure of the os uteri." We may therefore eliminate, almost without exception, all cases of excessive accumulations during gestation, they being as a rule nothing more than hypersecretion of the liquor amnii. The disease results from any cause which prevents the passage of fluids from the uterus into the vagina. It may be a small submucous fibroid or polypus, inflammatory adhesion, retroversion, or a plug of mucus which occludes the cervical canal or os. But, in either case, it is probable these conditions must be associated with excessive secretion of mucous or serous fluid from the uterine membrane. Farther, it is essentially a disease of old age, occurring after the climacteric is passed. Says Scanzoni: "It is obvious that the presence of dropsy of the uterus is not possible, except when the flow of the menstrual blood has entirely ceased, either because of the advanced age of the patient, or, if the woman is still young, when there had been a complete amenorrhœa." These limitations, then, reduce the probability of occurrence of the malady to a minimum. And, we find on searching the records, that such cases are very seldom seen. In the entire series of Archives Générales de Médecine, from 1823 to 1871, a period of nearly fifty years, no case is noted; neither in the Memoirs de l'Academie Royale de Chirurgie, from 1764 to 1774; neither in the London Lancet, from the first volume, 1823, to 1872; neither in the series of Transactions of the London Pathological Society, from 1845 to 1871; neither in the Transactions of the London Obstetrical Society, from 1859 to 1871. These, one hundred and ninety-nine volumes of miscellaneous medical literature, contain cases of almost every known disease, but no report of hydrometra is found.

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*American Jour. Med. Science, 1845, p. 239.

†Meigs, Woman and her Diseases, p. 348.

‡Grisolle, Traité de Pathologie Interne, tome I, p. 835.

§Sydenham Soc. Trans., I, p. 196.

Case.—On August 13, 1872, was called to see Mrs. Adelaide R——, aged eighty, mother of eight children. She is under the medium height, dark complexioned, much emaciated, and can not weigh over one hundred pounds.

She complained of pain in urination, water scant and passed with difficulty. Administered simple remedies, such as are usually given in ordinary cases of dysuria, and she felt easy by the 16th, when visits were discontinued.

September 1st, was again called to see her. She was suffering from the same trouble and from constipation. Prescribed as before and ordered an injection.

On my return found no special relief, and was informed they had trouble in passing the tube of the syringe, as it came in contact with a hard substance. On questioning closely, she spoke of a slight swelling which showed itself in the right side. Immediately made an examination and found a tumor, considerably less in size than the closed fist, in the right iliac fossa, seemingly attached by a pedicle to a larger tumor situated in the median line, and rising about three inches above the symphisis pubis. My first thought was that I had before me an ovarian tumor. On examination by vagina, however, I discovered the entire passage filled by a comparatively unyielding body, which, on placing my hand on the external tumor in the iliac fossa, I found directly connected with it. I essayed, by sudden pressure in the vagina, one hand being placed on the external tumor, to discover if fluid was contained, and thought I discovered slight fluctuation. But so uncertain was the feel that I concluded the walls of the tumor must be exceedingly thick. A mystery, however, was the fact that I could make out neither *cervix* or *os* uteri. An examination per anum revealed the same tumor pressing down on the rectum; but here it presented an exceedingly unyielding feel, so much so that I felt closely to discover if there might not be schirrus. The examination was in no way painful to her, neither did pressure on the external tumor cause uneasiness, other than a desire to urinate.

I concluded the patient was the subject of fibro-cystic disease of the uterus, with considerable thickening of the uterine walls, supposing the os so enlarged that its conformation was lost. Another practitioner, who examined the tumor, decided it to be ovarian.

Having thus discovered the cause of her symptoms, the succeeding treatment was entirely palliative, owing to her advanced age—eighty years.

During the course of her illness she suffered greatly from painful micturition and a continual desire to evacuate the bladder. At one time retention of urine rendered it necessary to use the catheter each day for a week, after which she passed urine with comparatively slight inconvenience. An incessant desire to go to stool was also manifested, so that she was up several times during the night with ineffectual result. This symptom was, however, obviated in a measure by administration of small doses of fluid extract of senna, the contents of the large intestine being thereby liquified and passing with little inconvenience. During the last month of her sickness, this was, however, unnecessary. From time to time she experienced slight febrile exacerbations, the pulse not going above 108, and no increase of pain being noticed, other than an aggravation of dysuria. When free from these attacks, the pulse was feeble and intermittent. She complained of no severe pain other than that noted, except at one time she complained of considerable pain in the left foot, which passed upward to the thigh. This, however, passed off within a couple of hours without remedies, and there was no return. The tumor itself was never painful during her illness. The last weeks of sickness she suffered exceedingly from vomiting and nausea, so much so that she could not speak without retching, but experienced little or no pain. The tumor did not appear to increase from the time first seen till death. Her mind was clear to the last. She died December 26, 1872.

Autopsy. December 27th, twenty-four hours after death. On opening the abdominal cavity a tumor was found in the right iliac fossa attached to a larger tumor, which dipped down into and entirely filled the pelvis. There were no adhesions between it and the surrounding tissues, although Prof. P. S. Conner, who removed the tumor, experienced considerable difficulty in dislodging it on account of its intimate contact with the pelvic walls. The bladder was pressed forward and flattened against the pubic arch. The main tumor rose two or three inches above the arch. When removed, the tumor was discovered to be the uterus distended by fluid. The cervix of the uterus was completely obliterated and the os distended to about the size of a quarter of a dollar, with thin edges, and closed by an opalescent membrane about one line in thickness, which formed a smooth continuous surface with the wall of the vagina. This membrane was ruptured during removal, and about two quarts of yellowish, serous fluid, containing white flocculi, escaped.

The auxiliary tumor which had occupied the iliac fossa was found to be the distended right fallopian tube, about three inches in diameter and three inches in length. *There was no trace of cyst wall within the uterus.* The membrane at the os was intimately adherent to either edge. Within the walls of the uterus, imbedded beneath the mucous membrane, and also beneath the peritoneal coat, several stony, pearl-shaped bodies were found, varying from one to two and a half lines in diameter. The uterine walls were exceedingly thin, in some places translucent. The right ovary was adherent to the distended fallopian tube, the left occluded at entrance to the uterus. The right uterine artery contained ossific plates.

The bladder was small, the coats thickened, with a sacculated condition at the point of entrance of the ureters, and congestion of the neck.

The arch of the aorta was ossified in some places through the entire circumference.

The liver and kidneys were healthy, but small; also, the lungs and stomach were normal.

To-day, January 24, 1873, I measured the specimen, having been in alcohol since the autopsy. I find the length of the uterus, from os to fundus, seven inches; the width stretched upon the hand six inches, and filled with water contains twenty ounces; the right fallopian tube two and a half inches in diameter and three inches from extremity to point of entrance into the uterus. These measurements do not, however, represent the size as it was during the life of the patient—alcohol has thickened and contracted the tissues; and when tightly distended it must have held at least two quarts of fluid.

This case teaches the possibility of the occurrence of hydrometra, though, from search of the records, we are impressed with the fact that the probability of any given instance of abdominal or uterine tumor being this disease is exceedingly—excessively—small. In the various authorities which we have consulted there are references to such tumors, but of all of them there are, probably only two or three that are reliable in which autopsies have been made. One that is almost universally referred to, is that reported by Dr. A. T. Thompson,* in 1823.

This was the case of a widow woman, aged sixty-five, mother of several children, of intemperate habits, who complained of an abdominal tumor which gave her considerable uneasiness and pain. "It was situated in the lower part of the abdominal cavity, rising as it were out of the pelvis and occupying the iliac, hypogastric, and umbilical region. She appeared as large as if six months gone. An indistinct fluctuation was perceptible in the tumor, and the least pressure on it caused pain. It was supposed to be a diseased ovarium, but no examination was made per vaginam. The accompanying symptoms, however, denoted greater derangement of the system than usually accompanies dropsy of the ovarium. These were want of appetite, considerable nausea, furred tongue, the pulse quick and feeble, the bowels irregular, and the urine scanty and high colored." The treatment consisted of administration of mercurials, and leeches and blisters over the tumor, under which, says Thompson, "its increase was arrested, but the sensation of pain on pressure remained unabated." Meantime dry gangrene attacked the left foot and extended to below the knee, where a line of demarcation was formed. Amputation above the knee was performed, and she died three days afterward.

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*Medico-Chirurgical Transactions, XIII, p. 171, et seq.

On autopsy they found the uterus entirely filling the pelvic cavity and great part of the abdominal. It was filled with fluid, and "partly sphacelated in its peritoneal covering on the upper portion or fundus. The liver was much diminished in size and adherent to diaphragm throughout; gall bladder large and turgid, with deep-colored bile; the stomach, colon, and other intestines, with the omentum, were glued together in many places, and in some cases was in an evident state of sphacelation." On removing the diseased organ from the body and making an incision into it, the quantity of fluid was found to measure eight quarts and of a dark-brown color. It coagulated slightly when heated in a spoon. "The existence of a large hydatid within the cyst was suspected, but this opinion was incorrect, the sac being merely the uterus, in the cavity of which the fluid was contained. The internal surface of the organ was not more irregular or more spongy than in its natural state, but none of the orifices could be found, for even the os uteri was interiorly as *completely obliterated as if it had never existed*, and although its situation could be traced in the vagina, yet even there it was very faintly marked." On examination of the larger blood vessels in the abdomen, the aorta was discovered to be ossified two inches above its bifurcation. The left internal iliac was also ossified in several places; in some places the bony portion nearly embracing the cylinder of the vessel.

The above is the only case of true hydrometra of which we have been able to find a complete record. That of Mr. Coley, noticed in the Medico-Chirurgical Review,* appears more closely allied to hæmatometra than hydrometra.

A recent French writer on diseases of the uterus refers to Cruvelhier as having established the existence of hydrometra by autopsies.† On consultation of this work‡ we find, under Genre I, Kystes serĕux, Espece XVII, Kystes séreux de la matrice, the following: "We distinguish ordinarily two species of hydrometra; the one formed by hydatids, the other by serosity. I have already spoken of hydatids of the uterus. The majority of observers have not noticed if these collections of water were contained in a cyst or in the cavity of the organ. MM. Rayer and Prosper Lafosse have found lately in a woman aged twenty-four years, who had been regarded pregnant, a serous cyst developed in the thickness (epaisseur) of the uterus. One would have thought, at first view, that the water was contained in the cavity of this organ, but a stylet introduced in the vaginal orifice penetrated in this cavity, which occupied the anterior part of the cyst. Perhaps all the observations which we possess on hydrometra of the uterus are only examples of serous cysts of that organ (Peut-être toutes les observations que nons possédons sur les hydropsies de matrice ne sont elles que des exemples de Kystes séreux de cet organe). He then states that the disease has never been observed in virgins, that it simulates pregnancy, that women believing themselves pregnant "discharge at the end of a certain time a great quantity of water," quotes from Guillemeau, Vesalius, Drelincurtius, and closes with this single observation: "I assisted at a puncture of the uterus, through the lips of the os (à une ponction par le museau de tanche faite à la matrice), in a case of dropsy of this organ. The patient died; at the opening they found that the instrument had not traversed the walls of the uterus and peritoneum as some believed. I have not noted the details of this curious case." At a subsequent time Cruvelhier may have met with a true case of hydrometra, but we very much doubt it, as his Anatomie Pathologique, avec figures lithographiques et coloriées, 1829–35, gives no illustration or allusion to such a case, though hydrometra hydatica receives full mention and drawings.

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*October, 1836, p. 358.

†Courty, Maladies de l'uterus, Paris, 1870, p. 684. "L'existence de l'hydrométrie idiopathique a été constatée à la suite d'autopsies d'une maniere indubitable, par M. Cruvelhier (Anat. Patholog., t. II, p. 849), par M. Thompson (Medico-Chir. Transactions, XIII, pt. 1, p. 70)."

‡Cruvelhier, Anatomie Pathologique, Paris, 1816, tome I, p. 280, 281.

Klob* thinks the cases of Vesalius† and Blancard, in the first of which 180 pound of fluid were evacuated, and the second 185, were ovarian cysts lying close to the thin-walled uterus affected with atresia of the internal orifice. He refers to Kiwisch's case, in which two pounds of fluid were found in the uterine cavity, which was dilated to the size of an adult's head, and gives the pathology of the disease.

The difficulty in *diagnosis* of a case of hydrometra depends more on the rarity of its occurrence than any other point. For if the attention should be directed to the possibility of its presence, the observer would probably establish or negative the proposition without much difficulty. However, it must be noted that the

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*Klob, Pathological Anat. Female Sexual Organs, Am. ed. 1868, p. 120.
†Vesalius, De corp. hum. fabr., lib. V, cap. 9.

presence of *fluctuation* by vaginal or rectal exploration is by no means so readily determined as one would imagine. Says Scanzoni:* "The greater the uterus is, and the higher it mounts into the abdominal cavity, the greater also is the dilatation of its inferior portion, which sometimes presents to the exploring finger a fluctuation—little marked, it is true." Again,† in speaking of the *consistence* of the uterus, "The firmness and hardness are due to the increase of the walls of the tumor in nearly all cases, except where the walls undergo a powerful distension by a rapid and very considerable accumulation of fluid in its cavity. This is what takes place in those rare cases of hydrometra and hæmatometra, where the walls of the organ are found rather thinned than otherwise." In our case this feature was especially noticeable. The uterus, closely incased in the pelvic cavity, was removed with some difficulty at the autopsy, and when explored by the vagina during life, it was quite immovable and presented the feeling of fibroid. The pressure on the internal wall of the uterus, which dilated the fallopian tube to the degree mentioned, must have been considerable. That the membrane which closed the os was as thin and extended at the time of examination, nearly four months previous to death, as at the autopsy, is doubtful. The same difficulty in detecting fluctuation occurred in Coley's case. "He could discover no fluctuation in the uterus from the vagina,"‡ although "the fibrous portion or body of the uterus was so disorganized that it was no thicker than an ox bladder."§ An exploration by sound in our case would have been made but for the impossibility of discovering the os tincæ. On this point Scanzoni ‖ observes, "Moreover, atresia of the external orifice, which is a most frequent and important variety (of atresia) does not permit the use of the sound. For, when the neck has united in the dilatation, and the os tincæ is completely effaced, it is utterly impossible to discover the place where the attempt to introduce the sound should be made."

The *treatment* of hydrometra is to evacuate the contents of the uterus, and then make such topical applications to its lining membrane as will restore it to its normal condition and restrain excessive secretion of mucus. Scanzoni relates a case of a woman, aged fifty-seven, in which there was such dropsical effusion that the uterus mounted about two inches above the symphisis pubis. By frequent injection of astringent liquids and repeated cauterizations of the uterine mucous membrance with solid nitrate of silver, he obtained such amelioration that the uterus no longer sensibly passed above the symphisis pubis, and the resulting symptoms which had much tormented the patient disappeared almost completely. This condition continued up to the time of his writing, that is to say, nearly three years subsequent. Some cases terminate spontaneously by discharge of the fluid. Thompson* relates the case of a courtesan, who supposed herself pregnant, having increased in size for eleven months, but, no motion of child having been felt, applied to him. He supposed it to be ovarian dropsy and proposed to evacuate with a trocar. She would not, however, submit, and a short time afterward was relieved by discharge of fluid per vaginam. She afterward continued in good health. He also refers to a case related by Johannes Benedictus Grundel, which occurred in a Hungarian countess in 1698. A tumor appeared in the abdomen and increased in size, but no quickening being felt she was thought to be suffering from ovarian dropsy. She was recommended to use warm baths, and having followed the advice for eight days, the orifice of the uterus was opened. And adds Grundel, "*magna humoris fœtedi suburra una cum copiosis flatibus ex utero evacuato.*" She recovered her health perfectly and bore two children. Cases are reported† in which the administration of secalæ cornutum has caused contraction of the uterus and expulsion of the fluid. It must have been, however, in the early stage of the disease, when the muscular tissue still retained its integrity.

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*Scanzoni, Diseases of Females, Am. ed., p. 212.

†Op. Cit., p. 35.

‡Medico-Chirurgical Review, October, 1836, p. 358.

§Id., p. 359.

‖Op. Cit., p. 89.

If the collection of liquid in the uterine cavity has attained a degree insupportable to the patient and complete occlusion of the os exists, Scanzoni recommends puncture of the uterus by means of a long curved trocar, permitting the trocar to remain for a long time, or introducing bougies to dilate and keep open the orifice, so that after cicatrization of its borders, topical remedies could be applied for moderating the secretion of the uterine membrane. This proceeding, however, he tells us, had never been put to the proof.

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*Medico-Chir. Transac., XIII, p. 171.

†Fantonelli, Gaz. Med. de Paris, 1837, p. 234. Sick—Schmidt's Jahrbucher, 1837, p. 42.

We may, perhaps, except from this statement, the case related by Cruvelhier and found on another page of this report, in which death was the result, although the peritoneum was not wounded. Courty* refers to a case reported in the Gazette Medicale de Strasbourg, 1843, p. 371, by Clemens, of Frankfort, in which puncture of the uterus was followed by death. In a case such as ours, the immediate evacuation of the uterus would probably have resulted in collapse and a gradual withdrawal by Dieulafoy's aspirateur would have been preferable. Whether, at her advanced age, a restoration of the uterine membrane to the normal condition could have occurred is doubtful.

In *conclusion* it should be noted that a number of *authoritative writers* on diseases of the uterus and of females, *do not refer to the malady in any way whatever.* It is certainly desirable that hydrometra should always be mentioned as a possible contingency in the diagnosis of ovarian tumors.

The following is a list of authorities consulted in the preparation of this article:

West—Diseases of Women, Am. ed. *Bedford*—Diseases of Women. *Thomas*—Diseases of Women, 1868. *Atlee*—Ovarian Tumors. *Hewitt*—Diseases of Women, p. 285. *Klob*—Pathological Anatomy of Female Sexual Organs, Am. ed., p. 117. *Scanzoni*—Diseases of Females, Am. ed., p. 208. *Churchill*—Diseases of Women, Am. ed., p. 212. *Meigs*—Woman and her Diseases, p. 348. *Peaslee*—Ovarian Tumors, p. 141. *Grisolle*—Traité de Pathologie Interne, I, p. 835. *Hippocrates*—Syden. ed., I, p. 196. Medico-Chir. Trans., XIII, p. 171. Boivin et Dugès Maladies de l'Uterus, Paris, 1833, t. II, p. 134–136. *Courty*—Maladies de l'Uterus, Paris, 1870, p. 684. *Cruvelhier*—Anatomie Pathologique, Paris, 1816, I, p. 280. *Cruvelhier*—Anatomie Pathologique du Corps Humain ou description avec figures lithographiques, et colorées, Paris, 1829–1835. Nélaton—Elements de Pathologie Chirurgicale, 1859. Amer. Jour. Med. Science, 1845, p. 239. London Lancet, 1823 to 1872. Trans. London Path. Soc., 1845 to 1871. Archives Générales de Médécine, 1823 to 1871. Mémoires de l'Academie Royale de Chirurgie, Paris, 1764–1774. Trans. London Obstet. Soc., 1859 to 1871. Schmidt's Jahrbucher, 1834 to 1868. Also, numerous works of midwifery.

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*Op. Cit., p. 685.

The following autopsies are referred to by Thompson:

Bonetus—Anatomica Practica, lib. iii, sec. xxi, obs. lv, § 8. *Hartmann*—Miscellanea Cur. Acad. Naturæ Curiosorum, Dec. 2, Ann., 1686, obs. 67. Works of *Monro. Vesalius*—Op. Cit. And those desirous of investigating for recorded cases consult *Voigtel's* Handbuch der Pathologischen Anatomie, vol. iii, or *Plocquet's* Litteratura Medica.

Art. III.—A Short Guide to the Qualitative Analysis of Solutions of the Common Bases and Acids.

By J. B. HOUGH, M. D., Professor of Physics and Chemistry in Miami Valley Institute, formerly in charge of the department of Medical Chemistry and Toxicology in the University of Michigan.

Since the profession of Ohio, at its last annual meeting, pledged itself "to the work of bringing about a reform in the chemical department of medical education," an apology is hardly necessary in offering for publication the following paper which, though not strictly medical, is not merely elementary, and may be made a collateral aid to the general practitioner in the determination of different points of inquiry. For the reasons and reactions of the various tests the reader is left entirely to his own resources. The table aims at practical utility and convenience. The numbers on the right refer to those on the left of the page. All precipitates, filtrates, solutions, residues, etc., should be numbered to avoid confusion.

ANALYTICAL TABLE.

1.	For detection of bases, see	2
1.	For detection of acids, see	24
2.	Precipated by excess of chlorhydric acid	3
2.	Not precipated by excess of chlorhydric acid	5
3.	Precipate is soluble in much water	Lead
3.	Precipate is insoluble in much water	4
4.	It is soluble in ammonia	Silver
4.	It is insoluble in ammonia	Mercury
5.	Prec. by chlorhydric *plus* sulphydric acid	6
5.	Not prec. by these acids	13
6.	Prec. soluble in yellow ammonic sulphide	7
6.	Insoluble " " "	10
7.	When reprecipated by chlorhydric acid, it is again soluble in ammonic carbonate	Arsenic
7.	Not thus soluble	8

8. Pr. is dark colored........ 9

8. Pr. is orange colored........ **Antimony**

9. Test separately for **tin, gold, platinum**, and traces of **antimony** and **copper.**

10. Pr. is soluble in nitric acid........ 11

10. Pr. is insoluble in nitric acid........ **Mercury**

11. Reprecipitated by sulphuric acid........ **Lead**

11. Not reprecipitated by sulphuric acid........ 12

12. Ammonia in excess produces a colorless solution. Test for........ **Cadmium**
Blue solution........ **Copper**
White precipitate........ **Bismuth**

13. Prec. by ammonic chloride, plus ammonic sulphide........ 14

13. Not thus precipitated........ 20

14. Prec. is soluble in excess of strong potassic hydrate........ 15

14. Insoluble " " "........ 17

15. Solution green, and reprecipitated by long boiling........ **Chromium**

15. Not colored nor reprecipitated........ 16

16. Prec. by ammonia........ **Alumina**

16. Not precipitated by ammonia........ **Zinc**

17. Pr. dissolved in chlorhydric acid is reprecipitated by ammonic chloride, plus ammonia........ 18

17. Not reprecipitated........ 19

18. Test separately for **iron, baryta, strontia, lime**, and **magnesia.**

19. Precip. by acetic acid plus sulphydric acid and heat........ **Nickle** and **Cobalt**

19. Not thus prec........ **Manganese**

20. Prec. by ammonic chloride, ammonia, and ammonic carbonate........ 21

20. Not prec........ 22

21. When pr. is dissolved in a little chlorhydric acid, calcic sulphate produces a precipitate immediately........ **Baryta**

21. After some time........ **Strontia**

21. Not at all........ **Lime**

22. Volatile........ **Ammonia**

22. Non-volatile........ 23

23. Colors flame yellow........ **Soda**

23. Colors flame violet........ **Potassa**

23. Colors flame crimson........ **Lithia**

24. All bases, except alkalies and alkaline earths must first be removed by sulphydric acid, ammonic sulphide, ammonia, or ammonic carbonate. A few acids, such as those of arsenic, antimony, and chromium, will have been determined as bases. The concentrated solution *exactly neutralized* by ammonia is:
Precip. by baric chloride........ 25

24. Not precip. by baric chloride........ 37

25. Pr. is soluble in cold chlorhydric acid........ 26

25. Pr. insoluble in cold chlorhydric acid........ 36

26. With liberation of gas........ 27

26. Without liberation of gas........ 29

27. Gas renders lime-water turbid..**Carbonic** acid
27. Gas smells like burning sulphur.. 28
28. And liberates free sulphur..**Hyposulphurous**
28. Does not ....**Sulphurous**
29. The sol. of the pr. in chlorhydric acid, when neutralized by ammonia, is reprecipitated by calcic chloride.. 30
29. Not reprecipitated by calcic chloride.. 35
30. Examine in two portions: First portion.. 31
30. Second portion.. 34
31. Soluble in acetic acid.. 32
31. Insoluble in acetic acid 33
32. Test separately for **phosphoric, phosphorous,** and **boracic*** acids.
33. Test for **oxalic*** and **fluorhydric** acids.
34. Soluble in potassic hydrate, and reprecipitated by boiling...**Tartaric** acid*
34. If not 31
35. Test for **citric** and **malic** acids.
36. Soluble in hot chlorhydric acid, with liberation of free chlorine. **Selenic** acid
36. Insoluble in hot chlorhydric acid ....**Sulphuric** acid
37. Precipitated by silver nitrate 38
37. Not precipitated by silver nitrate.. 43
38. Pr. dissolves in nitric acid 39
38. Pr. does not dissolve in nitric acid.. 40
39. Nitric acid solution evaporated to dryness, and treated with chlorhydric acid and hot water, dissolves.. 32
39. Does not dissolve. Test for **sulphydric** acid.
40. Soluble in warm ammonia.. 41
40. Insoluble in warm ammonia 42
41. The original solution (from **24**), in which baric chloride produced no precipitate, may be tested separately for **chlorhydric, bromhydric, cyanhydric, ferro-cyanhydric,** and **ferri-cyanhydric** acids.
42. Test for **silicic, iodhydric,** and **sulpho-cyanhydric** acids.
43. Prec. by neutral ferric chloride 44
43. Not prec. by neutral ferric chloride.. 47
44. Pr. is light brown.. 45
44. Pr. is black 46
45. Test for **benzoic** and **succinic** acids.
46. Test for **tannic** and **gallic** acids.
47. If the solution becomes dark red, test for **acetic** acid.
47. A portion of the same, or of the original solution, is evaporated to dryness, or nearly so, and tested for **chloric** and **nitric** acids.

Thus, by successive steps, the original solution is divided and subdivided into filtrates and precipitates, solutions and residues, suited to the application of the various tests for the corresponding bases and acids, and having thus reached an indication of the presence of some particular body, it is necessary in all cases, in order to guard against error, to demonstrate its presence by numerous confirmatory tests. An account of the latter will be found in elementary text-books of chemistry, the U. S. Dispensatory, and works on qualitative analysis.

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*Not prec. by baric chloride in presence of ammonic salts.

A single example will suffice to illustrate the use of the table. We have a colorless, transparent solution supposed to contain a single salt; one base in combination with one acid. It is neutral to test paper, and has a warm, pungent, saline taste.

1. We determine its base according to **2.** A few drops of it in a test tube or watch-glass are acidified with chlorhydric without producing any precipitate: this directs us to **5.** Chlorhydric and sulphydric acids together produce no precipitate. We pass on to **13.** Ammonic chloride with ammonic sulphide still give us no precipitate. Passing on to **20,** we try ammonic chloride, ammonia, and ammonic carbonate together, and do not yet produce any precipitate. We go on to **22,** and evaporate a few drops at a gentle heat and find a residue left. We then heat it to redness, and find it is non-volatile. Passing to **23,** we add to the residue a few drops of clean, strong alcohol and ignite. A beautiful violet flame indicates **potassa.** We apply numerous confirmatory tests for that base, and find the indications correct. We next proceed to determine the acid according to **24,** as indicated. We have just found the base to be an alkali, and so we need not remove it. Baric chloride gives no precipitate, so we pass to **37.** No precipitate is given with nitrate of silver: pass to **43.** Neutral sesquichloride of iron gives no precipitate, and so we pass to **47.** The solution becomes much darker and redder than the iron solution alone would make it if the acid were chloric or nitric. So we test for **acetic** acid, and find that all its appropriate tests confirm the indication. Thus we conclude that the salt in solution is **acetate of potash.** Where many bases and acids are presen, tthe work of separating and examining the various precipitates and residues becomes, of course, somewhat complicated; though the course of each body is practically the same as though no others were present. The few exceptions are comparatively unimportant and of rare occurrence. It is often desirable to test for some one particular base or acid merely to decide the question of its presence without regard to other bodies. This can be done in complex solutions only by some systematic method. For this purpose the table will be found convenient.

Translations.

Observations to be made on the Organs of Respiration, and Rules to be followed in the Practice of Hydrostatic Test in Judicial Inquiries, in Cases of Supposed Infanticide.

By M. A. DEVERGIE. Translated for the Cincinnati *Lancet and Observer* from the *Annales D'Hygiene Publique*, by ROBERT DENIG, M. D., Columbus, Ohio.

The 300th article of the penal code defines infanticide to be "the murder of a new-born infant." The word murder, synonymous with voluntary homicide, indicates at once the channel in which the physician should direct his researches.

1. The examination for wounds, or means employed to extinguish the life of the child.

2. To satisfactorily prove that the child was living when the attempt was made on its life.

Some writers are in the habit of discussing the question of viability as related to infanticide. We might even cite numerous instances in which tribunals have gravely considered this question, as bearing upon their decision under similar circumstances. Now the question of viability of the infant has really no relation at all to the subject of infanticide. It may under other circumstances be a legitimate subject of inquiry, as in cases of survivorship, paternity, succession of inheritance, etc.

In cases of alleged infanticide it is a matter of little or no consequence whether the child is born viable or non-viable; that which *is* essential is, has the child been born alive?

The proof of the life of the child at birth may be derived from two orders of facts; either by lesions which are only compatible with the child's having lived, or by the fact of respiration having been either completely or incompletely established in the child's lungs, at the moment of, or after its birth. I say completely or

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NOTE.—The Society of Legal Medicine in Paris, having had frequent occasion to observe great defects in the practice of the *docimasie hydrostatique*, when it has been consulted in regard to reports made by physicians in cases of alleged infanticide, invited M. Devergie to draw up a *resumé* of the process and manner of employing it, of which the following is the result.

incompletely, since, in the eyes of the law, it is not important to determine how long the child has lived, but only *has* it lived after birth.

That a respiration very incompletely established may become in the minds of the jury an extenuating circumstance is very well; but for the expert, there is in this condition only a proof of the life of the child.

The examination of wounds which bear the stamp of having been inflicted during life, and which may be proven to exist upon a child whose lungs give no indication of respiration having been established, belongs to the general study of infanticide; at present we are concerned only with the means by which we can demonstrate the presence or absence of respiration. These means consist: 1. In the physical examination of the lungs; 2. In the so-called hydrostatic test; two orders of research which are closely related to each other and ought never to be separated.

We will commence by indicating the steps to be taken to arrive at the verification of these two orders of facts. The body of the child being placed on its back, we make two oblique incisions in the anterior parieties of the chest; we direct these from below upward, on a line with the cartilages of the ribs, at a point most removed from the sternum, and prolong them to the articulations of the clavicles with the same.

These incisions are united inferiorly by means of a third transverse incision, which is made immediately above the insertion of the diaphragm along the border of the ribs. These three incisions include a triangular space, having its base below, and comprehending the sternum and cartilages of the ribs. The thorax alone is laid open. This triangle is then raised from its base by detaching the pericardium from the sternum; then we carefully disarticulate each clavicle, avoiding, carefully, injury to any of the large subjacent vessels. The two lateral incisions are then prolonged in front of the neck until they unite over the larynx.

We have thus laid bare, from below upward, the heart, of which the pericardium has been opened. The two lungs, the large vessels running to the heart, the thymus gland, a portion of the trachea and larynx. The ribs then pushed aside both on the right and the left, expose to view a large portion of the surface of the lungs. This is the manner of proceeding in the *physical examination* of the lungs. The expert will perhaps be struck by one of two aspects; either the lungs, when not having undergone decomposition, will be pressed back toward the bottom of the thorax, and do not appear to have ever filled its cavity; or, on the contrary, they are voluminous, filling up the entire cavity of the chest, and covering the heart in front. In the first case there are strong presumptions of the absence of respiration; in the second the presumption is in favor of respiration having been established.

Vessels: are they *filled with blood?* This condition favors death by asphyxia, when it is the veins which are distended. When these vessels are empty, with their parieties approximated, there is a presumption of death by syncopy; when the veins are distended with gas, putrefaction has probably already taken place.

The heart. When the right side is engorged, presumption of death by asphyxia; when distended by gas, putrefaction.

Thymus. Fleshy, elastic, without crepitation, is healthy; when crepitant with gas, advanced putrefaction.

Physical examination of the lungs. The tissue of these organs may present three different aspects: 1. It may be fleshy, of the color of liver, formed of small lobules separated from each other by a loose lamellated tissue which seems to surround each lobule. Each of these lobules has a more or less quadrilateral form. Examined with however much care, we perceive no evidence of vessels, or vesicles. This aspect gives strong presumption of the absence of respiration.

2d *Aspect.* The tissue is elastic, aerated, soft, sometimes even crepitant, the surface of the lungs being of a rosy hue; we see running in every direction thousands of capillary vessels filled with blood; on examining the pulmonary surface carefully with the naked eye, or still better with a lens, and strong sunlight, we recognize distinctly the pulmonary vesicles distended with air, and of which the parieties are crossed by numerous small vessels of which we have just spoken. These indications give strong evidence of respiration having been established, and are of great value.

A condition intermediate between these two aspects may exist in cases of incomplete respiration. Again, the superior one-third, or one-half of the lung may be found to present the appearance mentioned under second aspect, and the remainder that of the first. When respiration commences to be established, the superior portion of the lungs is always first distended, and by degrees, as the function becomes more and more perfectly established, reaches the base. This circumstance explains the condition just described.

3*d Aspect.* The pulmonary tissue has preserved the color of the lungs in which respiration has not taken place, and nevertheless, on pressing them between the fingers, a certain degree of crepitation is observed. We see obviously, furthermore, between the fleshy lobules of the lungs, a series of air-bubbles; but these bubbles are large, varying from the size of a millet seed to that of a lentil. These bubbles are moreover almost always elongated, since they follow the sinuosities of the circumference of the pulmonary lobules. These are indications of gaseous putrefaction. So far the physical examination of the lungs has given only presumptive evidence of the presence or absence of respiration.

Docimasie hydrostatique, to which it is always necessary to resort, will usually resolve all doubts; we proceed to give now the manner in which it ought to be practiced. Open the trachea and see if it contain blood or frothy mucous, either colored or not colored. Separate the trachea from the vertebral column, detaching it from above downward, and remove with it the thymus gland, the heart, and the lungs.

Place this mass of organs in an appropriate vessel filled with distilled or rain-water, and abandon it to its own gravity. One of three phenomena will take place.

1. The immersion is complete and the mass goes to the bottom.
2. It floats on the top of the water.
3. These organs remain suspended midway in the vessel.

Now, neither the sinking nor floating of this mass proves absolutely either the absence or presence of respiration. This operation, so far, gives only presumptions.

When the immersion or sinking is complete there is a presumption of the absence of respiration, but when we bear in mind that if respiration is only partially established, in the summit of the lungs, for example, they may be readily drawn to the bottom of the vessel by the weight of the heart and thymus. If, on the contrary, almost the entire mass is submerged, and the summits of the lungs float, there is a presumption of respiration. At the same time, the putrified thymus filled with gas, a condition which often precedes similar changes in the lungs, may retain the lungs in a seminatant state, although the presence of air in the lungs may be entirely wanting.

These preliminary experiments, as showing all possible causes of the sinking or swimming of the lungs, though by no means indispensable in demonstrating the presence or absence of air in them, are nevertheless extremely valuable, in meeting many questions which may arise in the legal investigation calculated to throw doubt upon the result. The hydrostatic test rests entirely upon the fact that the pulmonary tissue, before the establishment of respiration, being more dense than water, lungs which have not respired sink to the bottom of the liquid, while the penetration of air into the pulmonary tissue, in consequence either of respiration or the development of gas as the result of putrefaction, rendering these tissues much less dense than water, the lungs should float on the surface of the fluid.

A second docimasian operation is then practiced on each lung separately, after having detached it from the heart, thymus, and trachea. In this case we may draw from the sinking or swimming of the isolated lung a much stronger presumption of the absence or presence of respiration, but still it furnishes only a strong presumption.

It is necessary, however, to observe, carefully, the degree or kind of floating or immersion which may take place under these circumstances; to note, also, which part of the lung floats, and which has a tendency to sink, since it would be easier to ascertain, before cutting each lung into small pieces—the next thing to be done—which part of the lung has been inflated, and which has not.

The absolute certainty of the existence or absence of respiration can be arrived at only by a third application of the hydrostatic test; *this last is alone conclusive.*

Take each lung, cut it with a pair of sharp scissors into pieces, about the size of a hazel-nut; put each one of these pieces successively into water, and then whether they swim or go to the bottom of the vessel, press them firmly between the fingers underneath the water.

1*st Hypothesis.* It is possible that nothing will be expelled from the pulmonary tissue by the pressure. In this case, the piece of lung which did not float before the pressure, will sink also after; we may hence conclude that it has not been the seat of respiration. If the same result follow with all the pieces of the lung, *the complete absence of respiration is demonstrated.*

2*d Hypothesis.* The fragment of lung thus compressed between the fingers may give rise to the escape of a series of air-bubbles, extremely fine, forming a foam on the surface of the water—sometimes with traces of blood; the fragment again abandoned to its own gravity, rises immediately to the surface; *this is a certain proof of the existence of respiration.* If all the fragments behave in similar manner, respiration has been established in every portion of the lung.

3*d* *Hypothesis.* If the piece of lung thus compressed, as formerly mentioned, gives rise to the escape of air-bubbles, of a notable size, which, for the most part, burst on coming to the surface, and the fragments sink when let free, in place of rising, a certain proof of the absence of respiration in it is established, the air-bubbles being due to the presence of gaseous putrefaction. The conditions of the second hypothesis, except the presence of blood, are found in the same degree in cases of insufflation of the lungs—a thing entirely unusual, which has never been presented, and which would imply a simulation of infanticide. We will point out in our resume what distinguishes insufflation from respiration.

RESUME.—1. *Proofs of respiration.* The lungs appear to fill the cavity of the thorax, and to cover the heart when respiration has been completely established.

2. The lungs are of a rose color, having myriads of little vesicles visible with a lens, and even to the naked eye; the parieties of these vessels traversed everywhere by an extremely fine net-work of capillary vessels.

3. Floating on the surface of the water, when placed on it even with the heart and thymus attached, when respiration has penetrated the entire lung.

4. Cut into fragments, the size of a hazel-nut, each fragment remains on the surface of the water. Supernatation is incomplete when respiration has been restricted to a portion of the lung. Strongly compressed between the fingers underneath the water, there escape from it a large number of very fine air-bubbles, which unite on the surface in a delicate foam, accompanied, sometimes, with a slight discharge of blood; after which each portion returns to the surface of the water, however complete and oft repeated may have been the compression.

The concurrence of these facts and experiments offer an unequivocal proof that the child has respired; completely, if all the fragments float—incompletely if a portion sink and others swim after having been thus compressed.

PROOFS OF THE ABSENCE OF RESPIRATION—1*st* *Hypothesis.* 1. The lungs are a compact, solid tissue having the color of the liver.

2. The lungs, placed in water, with the heart and thymus attached, go to the bottom.

3. The lungs, when separated from the other organs, also sink.

4. The lungs, when cut into small fragments, each portion sinks. Compressed between the fingers, no air escapes; abandoned to themselves, they go to the bottom. *Respiration has not been established.*

2*d Hypothesis.* 1. The lungs are made up of a compact substance, having the color of an adult liver, but on the surface we perceive air-bubbles, somewhat elongated in shape and of variable size, from that of a millet seed to a lentil, but no pulmonary vesicles.

2. Put into water with the heart and thymus attached, they swim or sink slowly to the bottom.

3. Each lung placed alone in the water exhibits the same phenomena.

4. The same is true of each portion of the lung when cut into fragments.

5. Each portion of the lung, when compressed between the fingers, gives rise to the discharge of air-bubbles, which rise to the surface and usually burst; the fragments, when abandoned to their own gravity, sink.

These facts and experiments prove that respiration has not taken place, and that the disengagement of air is due to gaseous putrefaction already commenced.

INSUFFLATION.—Inflation of the lungs by artificial means, can be distinguished from true respiration by the aspect of the pulmonary tissue. The lungs, more or less distended by air, have a dull, whitish appearance. We see, it is true, dilated pulmonary vesicles, but there is an entire absence of the capillary net-work of vessels running over their parieties, which is invariably found in lungs in which respiration had been established, and which impart to the lungs a roseate hue.

Insufflation, under the circumstances now being considered, would presuppose an intention of simulating infanticide. It is, moreover, performed with extreme difficulty by the mouth alone, and the introduction of an instrument into the trachea of a child, requires the skill of an expert; hence, it may be said with truth, that in no case of supposed infanticide, has the expert ever been embarrassed by the presence of artificial respiration or insufflation.

Cardiac Intermissions.

Par le Dr. CH. LASEGUE. Translated from the "*Archives Generales de Medecine*, of December, 1872, by THOMAS CHALMERS MINOR, M. D.

I do not believe I shall be taxed with exaggeration when I say that the study of cardiac intermissions has had little attention paid to it. It is sufficient to glance through the general treatises and monographs consecrated to the history of diseases of the heart in order to convince one's self of the insufficiency of our clinical knowledge regarding this subject.

We might believe that the authors who wrote before the discovery of auscultation, reduced to the only resources that the examination of the pulse and subjective observations of patients furnished them, must have given some attention to the subject. Not one of them paid it any special attention ; the majority do not even mention the existence of such a thing as cardiac intermissions. I will cite for example that voluminous work the treatise of Kreysig,* original to a certain degree, which recapitulates all that he knew or that he thought was known at the close of the last century. Kreysig speaks incidently, almost by chance, of rhythmical disorders of the heart, and his chapter on cardiac neuroses contains, outside of angina pectoris, only commonplace indications or inexact definitions.

More recent writers, even those who have so immensely contributed to the great progress of cardiac pathology, have consigned the study of intermissions to the last paragraphs of their books, without attaching to it either importance or interest. Compilers and authors of elimentary treatises could not do otherwise than abstain, owing to lack of material. This will be understood when one thinks of the enormous quantity of notions of a higher order that arise for the former to collect and the latter to vulgarize.

Laennec, who has touched lightly on all the questions relative to affections of the heart and studied deeply only a small number of them, appears to me to have furnished almost entirely the material that his successors are at such pains to expound.

We can, says Laennec, distinguish two kinds of intermissions ; the ones true, consisting really in the suspension of contractions of the heart—the others false, corresponding to contractions so feeble that they do not make themselves felt in the arteries or only communicate to them a slightly sensible impulsion.

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*Die krankheiten der Herzens.

Intermissions of the first kind are the most common; they often exist among the aged without troubling the health; among those who are not subject to it, it manifests itself on occasions of very slight indisposition. Among men in the vigor of life, it is observed only in diseases of the heart and particularly in hypertrophy of the ventricle and in the moment of palpitations.

The duration of this sort of abnormal suspensions of the heart is very variable. The return of intermissions presents not less irregularity.

The intermittence, which consists in the absence of a complete pulsation, which returns sometimes with an exact periodicity, at intervals more or less apart, the pulse being otherwise regular, constitutes the forerunning sign of the critical diarrhea discovered by Solano, of Lucca. This symptom of the circulation is not rare, and I have observed it frequently, says Laennec, in some epidemics; but it is probable that it is in the nature of some medical constitutions to not present it, for, with some pains that I have taken to investigate the subject in former times, I was not able to meet it. This species of intermittence corresponds most often to a contraction of ventricles much more feeble than others than to a real interruption of their movement.

I shall have occasion to show how these vague or too affirmative propositions are discussable; but at least Laennec has had the merit to distinguish the intermittence from other troubles of rhythm, and to note in passing the true intermission which constitutes the first kind.

Stokes,* and one sees the long period we omit, has treated in his tenth chapter of functional alterations of the heart. By way of exception, his divisions are wavering and his descriptions very confused. Nervous palpitations from the abuse of tea, of coffee, and tobacco already so many times spoken of, occupy him very nearly exclusively. His opinion seems to be that intermissions represent only a form or rather an incident of palpitations, and his object is exclusively to investigate the signs which distinguish functional troubles from organic lesions of the heart. To distinguish, says he, exactly the functional diseases from organic affections of the heart, is not such an easy thing as modern authors admit; one attains it rather by an instinctive cleverness, the result of experience and judgment, than by diagnostic rules which might be formulated. From the point of seeing facility in diagnosis, palpitations are divided, adds Stokes, into two classes, according as the cardiac action is accomplished or is not accomplished with regularity. But no part explains in what this division is useful or what diagnosis it facilitates. In this connection, Stokes, notwithstanding his high intelligence, falls into the frequent error, which consists in pursuing the elements of differential diagnosis amongst two classes of diseases, of which one only is deeply studied.

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*Stokes' Maladies du Cœur, Traduction Senac.

It is impossible for a physician of his worth to approach a subject without introducing some germs, some original contributions that he leaves to others the care of cultivating. Stokes, in the midst of unproductive repetitions, raises the capital question of the connections the functional troubles of the heart may sustain, or, in his language, nervous palpitations, with organic alterations. It is, says he, often impossible to determine the moment where the excitation and the irregularity of the action of the heart cease to be due to a functional trouble, in order to be connected to a dilatation or any anatomical alteration whatever. The difficulties of diagnosis are here much greater than one believes.

We have often seen the heart act very irregularly for the space of several months, and then suddenly resume a perfectly natural rhythm. Sometimes, the physician referred to informs us, the irregularity of the cardiac pulsation dated back many years and ceased at intervals.

In the German and French works, more recent still than Stokes' book, I have not, notwithstanding the investigation followed, found a single passage relative to intermissions, and I will say almost to functional troubles of the heart, that would appear to me proper to cite.

Dr. B. Richardson is, to my knowledge, the only author who, in these later times, has consecrated to rhythmical troubles of the heart a true monographical study.*

He admits three distinct sorts: In the first, which he designates by the name acute irregularity, the pulsations succeed each other regularly, but by series of five, ten, or more, and each series has its particular rhythm. This form is often met in anæmia after abundant losses of blood, and in various conditions of profound depression; it answers to feebleness of the heart.

In the second, which he calls prolonged irregularity, the pulse beats during the minute seventy, for example, and the minute following ninety or one hundred. We observe it in the case of acute cerebral affections, and especially in the hydrocephalus of children. Dr. Richardson never remembers having seen a case where this irregularity, coming on in the course of an acute cerebral disease, did not presage a certain death.

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*Discourses on Practical Physic, 1871.

The third sort, of which the author intends to treat exclusively in his short monograph, is intermittence properly speaking, consisting in the suppression of some normal beatings of the pulse, producing during its duration pulsations, or in suppressing two three, and more in serious conditions. The clinical showing leaves to be depreciated its lack of precision, because the author has not very rigorously separated the intermissions connected with organic lesions of the heart from those which are produced independently of these lesions. After having attributed intermittences of the latter order to a cerebral cause, he has slightly modified his first opinion in order to recapitulate his ideas in the following conclusions:

1. A longer experience has diverted me from the thought that I had had of associating cardiac intermittence to any symptom whatever of a cerebral lesion; paralysis of movement, or of sensibility, convulsions, chorea, cephalagia, etc. Fifty cases of which I have been a witness have not presented a single sign of cerebral or spinal lesion. It is impossible that, if the cardiac intermittence is under the dependence of an encephalic or rachidian affection, as would be, for example, a disease affecting the pneumogastric at its origin, other cerebral symptoms should not exist.

2. If the intermittence was due to an irritation of the pneumogastric at some point of its tract more or less distant from its origin, there would be other indications. There would exist pain, nausea, gastric troubles, in connection with the cardiac disorder. Nothing similar has been either noted or determined, and the rule is that the pneumogastrics remain outside of the question.

3. The intermittence appears to me not to be derived from an irritation, neither at the same time from a functional excitation of the nervous system. It coincides always with the enfeeblement of nervous activity. The heart is not impeded by a superior force—it is not sustained by a sufficient force.

4. Experiments made with narcotics seem to demonstrate that the cause of intermission is not cerebral. It is not the period of generalized muscular excitation, when the pneumogastric is mani-

festly excited, that the symptom is produced; it is to the contrary when the brain is dead, that the muscles influenced by the cord and the brain are dead, when nothing longer lives than the cardiac ganglions and the ganglions of the sympathetic.

5. The action of the sympathetic ganglions and of the true ganglions of the heart can not be the same. When that the action of the sympathetic weakens, and that intermissions come on, the cardiac centers continue to act feebly, even after all other nervous communication is interrupted.

As to the mechanism by which the intermissions are affected, Dr. Richardson supposes that the ventricles filled by the auricular systole do not contract in order to press upon the blood that they contain. The left side of the heart is full; the arteries are contracted upon a small column of blood, the veins are full; the right side, ventricle, and auricle is full. In a word, all the circulating system contains blood, in such a way that the line of the blood current is continued without interruption. When the ventricles contract after the suspension, pressure is made upon a double charge of blood and gives rise to a systolic bruit, more lengthy and more intense, followed by two slight bruits; the reduplication of the second bruit arising from a deficiency of synchronism in the movements of the aortic and pulmonary valves, or from this that the valvular contraction is made at two times.

I shall not follow Dr. Richardson at present regarding the ground work of his theory, but I shall return to it shortly. But before submitting the opinions which have been recapitulated to a critical revision, it is necessary to study the nosological and clinical contributions of the problem. What should one understand by the expression *cardiac intermittence?*

Intermittence does not signify irregularity. The heart presents for consideration: first, rhythm; second, intensity; third, sonorousness of beating. The irregularity bears upon these three elements, and, after its definition even, the word applies to all functions which escape from the rule.

Intermittence is an anomaly of an altogether particular order, which not only is neither connected to an impulsive force, neither to the sonorousness of pulsations, but which, limited to rhythm, only includes a very limited portion of the rhythmical deviations. If the beatings are unequal and one interval exceeds the others in duration, there is not intermission in a pathological sense. Otherwise all prolongations, which then would be silences which separate the contractions, would likewise merit the title and name of intermission. When we say that we establish intermittences or intermissions of the heart, we implicitly admit that the organ works regularly, beyond the suspensions which may come on from time to time, and more or less periodically break up its series.

I attach to this definition a true importance, because that the errors, which take place relative to functional disorders of the heart, are owing especially to the absence of definitions.

From whence comes, for instance, the confusion we meet among the best observers. Intermittences, irregularities, palpitations, troubles of rhythm of all kinds, are employed as synonyms, for the purpose of avoiding repetitions of speech, without our finding any explanation of any one of these terms. If these various perturbations coincided with each other, we might be excusable in not using more harshness; but this amounts to nothing, and the confusion which exists in the vocabulary of authors is not found in the cases.

Palpitation is essentially an exaggeration of cardiac impulsion, objective or subjective—that is to say, perceptible to the physician, or felt and complained of by the patient, and coinciding most often with a precipitate movement. In the majority of cases, the beatings are regular as to rhythm; in some they are separated by silences or rather by stoppages of an unequal duration. This form of disorder is met as a symptom of nervous affections, as a sign of commencing cardiac phlegmasias, as a complication of ancient lesions of the heart; but from thence the palpitation has only a diminished signification in regard to other phenomena.

Irregularity—vague word—generic and non-specific, will appear every time that the three cardiac elements are affected. Mitral insufficiency furnishes the type, because that it unites at the same time impulsions of variable intensity, an abnormal sonorousness on auscultation and disordinated movements.

Intermittence answers exclusively to a modification of rhythm easy to point out precisely, and which consists in this fact, that after a succession of co-ordinated beatings, there follows a period of repose more or less prolonged, to which succeeds a new series of pulsations alike in intensity and rhythm. It is this sort of anomaly that I wish to speak of, by distinguishing it expressly from other troubles with which it sustains no clinical relation.

It has been the custom to designate under the term intermissions of the pulse the cardiac intermissions, and, a singular thing, the authors, who have written with an excess of sagacity in regard to the qualities of the cephalic, abdominal, critical, and other pulses, have not, so to speak, taken into consideration the intermittent pulse. Laennec attributes, as we have before seen, to Solano the discovery of intermittences connected to a critical diarrhea, but he neither affirms nor disaffirms the justice of the opinion enunciated by the physician of Lucca.

There is no intermittent pulse if the heart beats with regularity; in this connection and without discussing its absolute value, the proposition of Bichat is true; to each kind of heart movement there is a corresponding kind of pulse; whatever may be the modifications of arterial pulsation, there is always an analogous modification in the beatings of the heart, without which the converse may also be true.

It is, then, not in place to attribute to the pulse a phenomenon which belongs entirely to the heart, and to the extent where it is to-day the practice to auscultate, there is no need of having recourse, as Bichat did, to proofs drawn from vivisections.

Cardiac intermittence, with the characteristics that I have given, is observed under forms differing very slightly, and moreover without great clinical importance. The heart beats normally, impulsion and rhythm, during a more or less considerable number of pulsations; then it stops for a space of time difficult to measure exactly in order to resume its course. It comes on accidentally when the suspensions seem to obey a sort of rhythm; it is repeated every four, five, six, eight pulsations; but this periodicity is never constant. It ceases at the end of a few minutes, and even during its short duration it is not as rigorous as one would believe from listening to the statements of patients.

Immediately after the intermittence, the first cardiac contraction seems habitually more energetic; sometimes it is separated from the second contraction only by an interval more brief than that which is interposed between the following pulsations. More often this increase of impulsion is imaginary. I shall speak again regarding the impressions experienced by the patient.

When the intermissions are reproduced at intervals more or less close, then they may take place after ten regular pulsations; after five or beyond, the thing is indifferent.

Intermittences not only do not come on under the dependence of palpitations, but any of the causes which excessively excite the cardiac activity exercise no influence upon them. Thus after a rapid walk, after a liberal repast, on the occasion of lively emotions, the beatings are accelerated in some proportion, or when the impulsion is augmented they keep their habitual way. The pulse has no more continued acceleration; it beats from seventy-five to eighty per minute, sometimes more, never less; we might say strictly that it is a little more frequent than in the normal state.

Violent palpitations, such as we see in certain hysterical crises, do not provoke intermittences. Only once have I had occasion, during a period of habitual intermittences, to assist a young girl in an attack of hysteria with cardiac spasms; while the palpitations lasted, I was not able to find any intermittences, and in ordinary conditions they rarely passed beyond twenty pulsations without the rhythm was broken. The patients, save a few, almost always were conscious of cardiac intermissions; they were warned of them by a particularly troublesome sensation, and only discovered it by chance, in feeling their pulses. The sensations they complain of are of several kinds. The least attentive, or may be the least sensitive, declare they perceive only the lively impulsion which follows the prolongation of silence; they complain of a palpitation returning at unequal intervals; to a higher degree, the cardiac repose is accompanied by a sort of anguish necessarily very transitory, but the return of the beatings or pulsations implied by an exaggerated impulsion, terminates the uneasiness, perhaps by giving to the patient a feeling of security.

In a third category, the patients describe their multiple impressions with details useful to note. They feel the two inconveniences which have been mentioned; the anguish during its suspension, the shock on the return of the pulsations; but still more they experience a very accentuated præcordial, or rather epigastric sensation. I have sought to seize, by an attentive analysis, the characteristics of this last subjective phenomenon, in giving to the subject that attention this sort of inquiry requires. I have attempted it; in the hope of being able to clear up the nature and the origin of the tonic spasm which constitutes the intermittence. Here, then, is that which I have observed, or rather that which the patients, interrogated with care, have observed. Some complain of a pressure at the pit of the stomach, or of a definite pain at each suspension; among others, the sensation is that of an imminent eructation which seems unceasing; others feel a fruitless yawning with gastric tension, propagated up as far as the jaws; among a very small number the yawning takes place but slowly and tardily. They very nearly correspond to the gastric spasms, so common and so frequent even to persons in perfect health—there can be no person living who has not been subject to it a number of times; in this connection they have appeared more explicit to me than many of the subjective indications with which we are forced to content ourselves. Altogether at least, in the conditions I have recalled, the tonic spasm is not limited so exactly to the heart as Dr. Richardson pretends when he says: "If the intermittence was due to an irritation of the pneumogastric, we should have pain, nauseas, gastric disturbances in connection with the cardiac disorder; nothing of the kind has been either noted or proved. I have in fact neither noticed nor found serious disorders of the digestive functions, and without knowing whether they arise, to properly speak, from an irritation of the pneumogastric, the gastric uneasiness spontaneously and minutely described by the patients seems to me to bear witness to the participation of this nerve in the trouble."

One does not meet irregularity arising from an organic lesion of the heart, which brings about in the least degree an epigastric uneasiness, corresponding to longer suspensions of beatings, and if I have not found it for example, it is not the fault of having searched for it. In the intoxication from digitalis, when the retardation of the heart attains such enormous proportions that any intermissions only equal the long silences that we observe at certain moments between the two pulsations, the patients, notwithstanding uneasiness of the stomach which replaces vomiting, experienced no nervous sensation that I can remember; the uneasiness is dissipated when the contractions resume their rhythm. If the chance of observing individuals affected by cardiac intermittences is not very common, each patient furnishes, at each intermission, the occasion for a study, and experience can repeat itself almost to infinity; we have then the right to affirm, if not its constancy, at least the frequency of the fact, and to affirm that the coincidence of a nervous gastric sensation, with the suspensions of the heart's action, is more nearly the rule than the exception.

In order to appreciate this question of subjective phenomena, it is remarkable that individuals who suffer from true cardiac intermissions are almost always conscious of it, and are the first to notify you of it, while the majority of patients affected by rhythmical disorders consecutive to a mitral lesion, do not even suspect the enormous variations that the physician discovers on objective examination.

If it is thus, it is necessary that, in one case, the sensation should be null or very obtuse, and that, in another, it should be so acute as to arouse uneasiness. The shock is so manifest; it is accompanied by a sudden and transitory anxiety so characteristic, that even after the cessation of the intermissions, the patients do not feel the pulse, but listen painfully in order to know whether the trouble of the heart will not be reproduced. It happens then, and I have carefully observed it, that a spasm of the stomach, an eructation which does not go to the length of the œsophagus, renews their apprehensions. And, in the meanwhile, no irregularities come on in the pulsations. This confusion, not only possible, but frequent, suffices by itself alone to affirm the frequent coincidence of a stomachical uneasiness with suspensions of the heart's action. Clinically there exist no little facts, and the characteristic of symptoms is, that the most insignificant in appearance are often the most significant in reality; so have I not a right to excuse myself for having insisted upon this point in detail, which has passed up to the present moment unperceived; if there exists, as I have admitted, a close connection between cardiac intermissions and certain gastric sensations, what must we conclude? Is it the heart, is it the stomach which is primitively the cause?

Observers have for a long time foreseen rather than studied the co-existence of complex cardiac troubles, palpitations, inequalities of impulsion, deviations of rhythm, with diseases of the liver and of the stomach. We see that Stokes mentions the fact without before entering into its examination, and he has left with it false generalities, which mask in medicine the vagueness of incomplete notions. There exists no primitive and denominated affections of the liver and of the stomach, which we could affirm might provoke either palpitations, or, above all, intermittences. But certain secondary affections of the digestive apparatus could sustain with the cardiac intermittences relations I can not precisely point out, but that I shall seek to indicate.

In order to make myself understood, I am obliged to resume the subject further on.

When a patient is attacked by a serious and chronic disease, such as we might call constitutional in the same sense as syphilis, the affection keeps during the earlier periods its distinctive characteristic, and its evolution conforms to its nature. Albuminuria is only albuminuria; the heart experiences only cardiac symptoms. At the end of a time, more or less long, the special phenomena exist; but there are joined to them a collection of common alterations, and the patient enters into that which we call cachexia; at this moment the local lesion seems to pass to the second plane, in order to leave to the general alterations of the health the first place.

The digestive functions are impeded to the same degree, and almost under the same form as among the cancerous, and among those who succumb after a prolonged suppuration; and, to see these things superficially, one is at least as much struck by the analogies, as by the diversities of the cachectic conditions which terminate chronic diseases altogether different at their *debut*.

These ultimate cachexias appear to me to furnish to the practitioner one of the most interesting subjects of study. As imperfect as may be their history, we refind it by the aid of antecedent lesions, or the lasting localizations of the disease.

On the other extreme we observe a class of cachexias that I will call initial or prodromic, and of which the judgment is extremely difficult when it is possible. A man feels his strength declining; he becomes thin, although he eats; he is physically and morally inferior to himself in all things. The functions are performed, but altogether or more like in a convalescent during the periods where the reparation seems to retrogade, because he makes no progress. For himself, he feels ill at ease, not daring to call himself sick; to others he has entered into a decline; there has been no change in his face, nothing interferes with his usual habits. Then one day, after weeks or months of this mysterious preparation, the disease truly strikes him and closes the preliminaries. Once cured, the patient tells us how much he has suffered without complaining, not knowing enough himself to recognize that he was in the midst of a trouble which had wholly depressed his constitution. Chronic diseases have from thence, the same as acute diseases, but under other forms and during a longer space of time, a prodromic stage to the generalized symptoms, the equivalent of the fever, less the frequency of the pulse and the elevation of the temperature; but with the majority of the other febrile phenomena attenuated, and above all with that prostration of the health that we do not succeed in defining and that each one of us know from having experienced it.

By the side of this initial cachexia which serves to preface any disease, I must place the cachexia that I have designated by the name premature or hasty, which serves transitorily between the cachectic conditions of pathological elaboration and the cachectic conditions, which I hesitate in naming, of mortuary elaboration. The individual, attacked by a disease which becomes chronic, lasting an indeterminate length of time, not injuring life immediately, in place of preserving intact the sensations which do not participate in the partial or local disorder; there goes on in his whole body an ambiguous febrile movement, dryness of the skin, paleness, digestive troubles, changes in the urine, changes in the condition of the intestinal functions, œdema of the lower extremities without albuminuria; in a word, the whole collection of phenomena called cachectic are developed before the patient's last hour seems to have come. The physician who would intervene without being enlightened by the anamnesia, would declare that he is assisting at the termination of an old disorder, and in the meantime the attack is recent. In presence of this universal disorder which spares no point of the economy, all fears are justifiable, although often the crisis is exhausted, the functions resume their course, and the patient, though not cured, is replaced in the normal movement of the affection from which he suffers.

It is in these two last conditions that it has appeared necessary for me to call cachectic, for want of a more appropriate name, that we especially observe cardiac intermissions.

Every condition of general *malaise* answering more or less to the preceding definition does not cause intermissions; my firm conviction is that every well-characterized intermission is connected to one of these conditions.

I can see no profit in reporting cases compendiously collected and related, which would not answer in giving a view of the whole matter. I will content myself by recapitulating some cases, rather for the purpose of giving epitomized histories, than to support a demonstration.

A man of fifty years, wearied by labor more prolonged than excessive, lost rather his appetite that his aptitude to nourish himself; he experienced unusual lassitude in the inferior extremities, they pained him when he awoke in the morning; a dull headache; intellectual sluggishness which is only conquered by an effort; heat of skin; susceptibility to the least cold; constipation alternating with diarrhea. He has become thin and pale, and his friends are disquieted about him, noticing the progressive failing of his health. After a lapse of time that it is impossible to precisely state, cardiac intermissions come on with a sensation of epigastric shock, anxiety short and in proportion to each suspension. These symptoms cause him to consult us regarding his health; we try, without effect, rest, tonics, change of climate.

A diffuse phlegmon shows itself at the angle of the jaw; the disease lasted several months. During its active and regular convalescence, the intermissions suddenly ceased, and never afterward reappeared. They had lasted about six months.

A young girl of eighteen experienced a profound disturbance on the occasion of her intended marriage; at the time appointed for the wedding, after many hesitations and perplexities, she broke off the match. Little by little she fell into a cachectic condition, that we should call one of anæmia or chlorosis, which was accompanied from the onset by a general condition of *malaise*, even greater than that we find in extreme states of chlorosis.

Menstruation remained very nearly regular; the vascular and cardiac souffle did not exceed the average of which we find so many examples among girls of the same age almost always in good health. She is fatigued, atonic, but not melancholy; no nervous disorders, no traces of hysteria even threatened. The cardiac intermissions appear and continue without palpitations, without dyspnœa, without pulmonary symptoms. The patient, after a supposed chill, is attacked by left broncho-pneumonia. We fear, with every appearance of reason, an acute tuberculization, which is not produced, however. At the end of about six weeks, and after great mental distress, convalescence began; it progressed regularly, and the intermissions became less regular from thence, then disappeared altogether. The young girl afterward married, and is to-day the mother of several children. She has never been subject to any new rhythmical or other disorders of the heart. Her father died owing to a mitral affection, contracted under exceptional conditions, of which I shall not speak here.

A lawyer from South America, living for a long time back in England, complained of a gradual diminution of his health, without well-defined symptoms. He has vague troubles of digestion, repugnance to food, a persistent sensation of fatigue which prevents him from working any length of time. The weakness seems to be predominant in the inferior extremities, to such an extent that we suspect a commencing paralysis. His head feels heavy; incomplete vertigo leads us to fear the existence of some slow progressive affection of the brain; no respiratory troubles; painful sensations disseminated in the walls of the chest. The patient, who, like the majority of his countrymen, uses too many cigars, is forbidden to smoke. Tonics are administered without effect.

We advise the patient a change of climate. He comes to Paris. Here, we can determine nothing more precise by the most minute examination, except the existence of cardiac intermissions of which the patient is conscious, but which cause him little inconvenience compared with his other sensations. The heart beats regularly with the exception of the more or less frequent suspensions, equal in duration, variable in number, which separate the beatings. Respiration is free.

After remaining under treatment six months, cutaneous stimulants being chiefly used, his general condition was notably ameliorated, the intermissions disappeared, and the heart being carefully ausculated did not furnish the least indication of a lesion. Since then, two similar crises likewise occurred, cured by change of habits and climate; they did not last as long as the previous attacks, and were not accompanied by intermissions. Among some patients, the length of the attack is less. The attack shows itself by less manifest symptoms, and, each time the general malaise returns, it produces intermissions which disappear on the return of health. I have known patients, who have thus undergone repeated crises of intermissions in the course of a year. Spontaneously, they speak only of this symptom, uncomfortable in itself or distressing, because it awakens amongst them an apprehension of heart disease. In following up the inquiry, we always find that the patients live in a condition of indefinable malaise, provoked by overwork or some other cause, and ending or not ending in a sort of an acute crisis.

These cases, which do not belong to hospital practice, are more frequent than one would be led to believe, and enter into the class of premonitory cachexias. I do not think I go beyond the truth, in saying that every time we discover cardiac intermissions in an individual not undergoing a classified disease, we shall be permitted to affirm the existence of a general and profound trouble of the health, and often the imminence of an attack of some sort or other.

The second category includes the cases where, on the occasion of a localized affection, the patient undergoes a general perturbation which throws him into a condition of cachexia at the same time premature and unforeseen. I will cite only one example, curious, and besides deserving of notice, which I shall epitomize as much as possible.

M. X., 43 years, has during his life already undergone many singular nervous symptoms, consisting of fearful vertigo, incomplete epileptiform attacks, obstinate insomnia with acoustic hyperæsthesia. One of his friends having died, he attended the funeral, and while so doing, took a severe cold; he, besides, was obliged to hold his urine, notwithstanding a pressing desire to evacuate it. On returning home, he could not evacuate his bladder notwithstanding continued efforts. We suspected a vesical spasm and a consecutive and transient local paralysis. The patient is sounded without difficulty; we again used the catheter the two following days. The third day, after a walk without excess of fatigue, pain came on in the right leg, with diminution of motion. The paralysis became worse, the left leg participating in the trouble. Movement soon became almost impossible, even in bed. The pain increases; fever, anorexia, vomiting, dry tongue, epigastric suffering, left intercostal neuralgia of extreme violence; pleurisy on same side; progressive œdema of the inferior extremities without albuminuria. Great debility, delirium only at night; constant oppression with pseudo-asthmatic attacks. Bed sores where the weight of the body presses, the usual ulcerations caused by the position of decubitus. During this time, cardiac intermissions repeating themselves every eight or ten pulsations, with a long silence and accentuated repetition plainly felt by the patient notwithstanding his weakness; no palpitations.

The rapid progress of the cachexia inspired the most threatening apprehensions; lacteal alimentation was tolerated, but each ingestion provoked a painful sensation. The evacuation of the stools had become as laborious as that of the urine, which was, at intervals, passed voluntarily. However, the patient's condition improved—except his paralysis. The effusion which occupied the inferior third of the pleural cavity was slowly re-absorbed; the pain became less; the digestive functions resumed their normal activity; the sores cicatrized. The patient recovered his strength; the cardiac intermissions became more rare; they were only noticed at long intervals and after a patient investigation. The patient, who was conscious of them, was no longer made uneasy by them on account of the long intervals that intervened, after which they ceased completely.

This phase of the disease, the only one I can recall here, lasted more than a month.

I might add to this observation other cases where lesions which were not connected to nervous centres, brought about the same consequences—intermissions and acute cachexia. But still again, I shall limit myself to giving a case, leaving to readers the task of observing the coincidence, that I have described to them, between the intermissions and certain cachectic conditions.

I have had occasion to examine at different times a young man, aged 22 years, suffering from an intestinal affection of not much consequence, and also subject to cardiac intermission, which he declares is congenital, or which, at least, goes back to an undetermined date. The intermissions of which he was conscious increased, he told me, when he experienced any lasting moral emotion, and were not produced under any other influence known to him.

He has never had palpitations, neither dyspnœa, and can stand, as his comrades do, the most violent bodily exercises. His health is besides generally very good.

This case, the only one of this sort that I have yet observed, will not enter strictly into the definition. Besides the suspensions of the beatings, we find a certain irregularity in the succession of non-interrupted pulsations, the impulsions of the heart are far from being always alike; but the intermission is much more perceptible than the other anomalies which had passed unperceived at a superficial examination.

Cardiac intermissions, such as I have described, and such as we find in the cases above reported, with the exception of the last, have only one characteristic in common with rhythmical irregularities due to lesions of the heart,—the intermittent suspension of the beatings. It neither determines accelerations of pulsation, nor exaggeration in intensity of impulsion, nor inequality in the contractions that betray a shock to the heart. It is not accompanied moreover by murmurs or pathological souffles. Except the prolongation of repose to which succeeds either a more acute pulsation, or two pulsations closely connected, the rhythm keeps that which musicians call its symmetry.

The differential diagnosis is easy to establish. No affection of the heart, at any period of its evolution, admits of a trouble thus limited. All provoke palpitations, multiple irregularities, relating to the collection of cardiac functions; even toxic affections, of which digitalis offers the most striking example, not giving rise to true intermissions; the pulsations which succeed the two suspensions of beatings are irregular as to their rhythm, and as to their impulsive force. It is the same in cardiac disorders provoked by hysteria, and which consist almost exclusively in palpitations with acceleration of the heart. However, at least, I have never had the occasion to observe a case of hysteria free from all complications of a cachectic form, where intermissions were produced.

Further, the causes which exaggerate the deviations of cardiac rhythm, rapid walking, accelerated ascension, emotions, etc., are without any influence whatever regarding intermissions. I shall make one exception only,—that regarding the ingestion of aliments. A certain number of patients, suffering from intermissions, complain of being more uneasy after eating. Examination made, the intermissions are neither longer, nor more frequent, subjectively; they seem to be more uneasy, and the patient is the only competent judge in this matter.

If the cardiac intermissions form a species apart in the series of rhythmical inequalities; if they are not connected to a substantial alteration of the organ, can they be considered as the prelude or warning of a lesion to nature at a period more or less remote? I believe nothing of the sort. As much as it appears to me judicious to attach an extreme importance to the least irregularities of the other orders, and of dreading them as a menace of the future, so intermissions properly speaking exclude a like prevision.

To recapitulate, intermission is a special form of rhythmical disorder of the heart. It is not the element *obligé* of any cachexia; but, as it is produced only on the occasions of a general and profound disturbance of the health, it acquires the value of an important clinical sign.

Hospital Reports.

CLINICAL REPORTS FROM CINCINNATI HOSPITAL.

SERVICE OF DR. WM. CARSON.

By **W. H. FALLS**, one of the Internes.

Dr. Carson presented the following case to the clinical class, in accordance with a plan adopted by him at the beginning of his course, of selecting such cases from his wards as would illustrate important symptoms of disease. His first lecture took up the symptom "dropsy," which was illustrated by several cases. This case was brought forward to show the significance of "contraction of the pupil" as a symptom. The history of this phenomenon showed how slow and gradual the evolution of practical knowledge has been at times in medicine. Between 1712 and 1727, Petit, in experiments upon animals, recognized the effect upon the pupils which division of the sympathetic in the neck had.* About 1854, or 127 years later, Dr. Gairdner,† of Scotland, applied these facts, which, after Petit, were repeatedly reproduced to the diagnosis of thoracic aneurisms.

The anatomical structure and relations of the iris were first considered. The most important facts bearing upon this case were considered to be the innervation of the iris by both spinal and sympathetic branches, and the connection between the third cranial pair and the cervical sympathetic. Stimulation of the sympathetic produces dilatation of the pupil; of the third pair, its contraction coming to the field of experimental pathology, these are the important phenomena produced by section of the cervical sympathetic—contraction of the pupil, ptosis of the corresponding eyelid, increased temperature of the face and side of the head, and probably of the surface of the brain itself. Bearing these facts in mind, he came to the investigation of this case. The history of the man shows that he has not met with any accident to the eye which would have produced such persistent contraction of the pupil; nor has he met with an accident of any kind. We may therefore exclude any direct lesion of the iris. The cause of the condition must be sought elsewhere. Tabulate the clinical features of this case, and you will find that you have almost an exact reproduction of the experimental phenomena above mentioned. We are naturally led then to see whether or not there be anything interfering with the innervation of the sympathetic. He believed that interference to originate in the large tumor on the side of the neck, which, from its situation, connections, size, and character, might be expected to press upon the cervical sympathetic. When we look farther for any other cause—such as aneurismal, or other tumor within the cavity of the thorax; evidence of brain lesions, such as disease of the pons varolii, which are known to produce persistent contraction of the pupil, but which are not apt to produce the accompanying symptoms—we do not find any. We infer then that this tumor has produced sufficient pressure upon the cervical sympathetic to paralyze it. It is not a stimulation of it, which would only develop a dilatation of the pupil, such as appears sometimes in the course of unilateral diseases of the thorax, and even of the abdomen.

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*Med. Chir. Transac., vol. 41, p. 400.

†Edinburgh Monthly Journal, August, 1855, p. 143.

F. Roque* has reported quite a number of unilateral affections in which the inequality of pupils was observed, and finds that the larger pupil corresponds to the side of the diseased organ; and that if there be an affection of both sides, but on one side more acute than the other, that the larger pupil is still on the side of the acute disease.

This case was not presented to the class for any therapeutical interest, but for its physiological, pathological, and diagnostic importance. The patient's age, general condition of debility, and the malignant character of the growth, preclude the idea of any successful medical or surgical interference.

After his first appearance before the class, he was taken with symptoms of meningeal affection of the brain, from which he died. The possible connection of that with the tumor, and its modifying effect upon the circulation of the brain and its membranes, was presented, and considered worth bearing in mind. Bernard has proved that the temperature and vascularization of the brain, or a portion of it, can be modified by section or paralysis of the cervical sympathetic.

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*Archives de Physiologie, January, February, 1872.

The lecturer summed up the practical lessons of the case as follows:

1. That its combination of physiological and pathological facts is well calculated to impress upon the student's mind certain important anatomical facts, such as the innervation of the iris, and the connection of the cervical sympathetic with the third cranial pair, as only in that way is the unusual symptom of ptosis of the corresponding eyelid in this case to be understood.

2. It is a demonstration of a pathological law, that the complete paralysis of a nerve abolishes the function of the part to which it is distributed, while the stimulation of it may heighten the functional performance of the part, or, what is of great interest to recollect, may produce such irritation as to bring about important trophic disturbances.

3. It also suggests a probable origin of the condition of pyrenia; as we find in the limited range of the cervical sympathetic increased temperature, so we may conceive that condition extended throughout other organs and parts by a cause producing more extended impression upon the nervous system.

4. Persistent contraction of the pupil is of great diagnostic importance, because of its frequent association with aneurismal and other tumors within the thorax.

This man died within two weeks, and the tumor with its connections, as far as possible, was shown in explanation of the case. The details of the post mortem are appended to the history of the case.

FREDERICK HEINMANN.—Admitted November 28, 1872; æt. 69; Germany; marble polisher. Transferred from the work-house today, where he has been an inmate for the past four weeks. States that his father died of dropsy; mother died of strangulated hernia. Never had syphilis. Had two attacks of gonorrhœa, about thirty years ago. Has always had good health until twelve years ago, when he had an attack of the rheumatism, and has been subject to attacks of it repeatedly since that time. About the same time he commenced to have a cough, which has continued to the present time, but is much worse during the winter season. Expectoration is sometimes white and frothy, while at other times it is muco-purulent. Has a soreness across his chest all the time, but is very much aggravated when he takes a long breath or coughs. Three weeks ago he had a chill, followed by fever, sweating, and pains in his limbs, more particularly in the right upper extremity and in his knees. Has had more or less pain in his bowels for the past four weeks. Has a large tumor on the left side of his neck, which he first noticed three months ago. When it first appeared it was about the size of a small marble, and situated immediately above the middle third of the left clavicle. Has grown very rapidly since that time. Has had difficulty in swallowing during the past two years. The dysphagia has not increased since the appearance of the tumor. Occasionally has slight pain in the tumor. Has had no difficulty in breathing.

Condition on admission. General appearance is that of one who has had to work very hard. Very feeble old man—poorly nourished. Bald-headed; gray hair and beard; eyes dark and sunken; high forehead; cheek-bones prominent, and hanging of the lower jaw; mouth open all the time; face has a slight waxy pallor; drooping of the left upper eyelid; left pupil contracted; right one normal; left pupil remains contracted; right one is active; right side of the face cool and moist; left side dry and warm; more wrinkling of the left side of the forehead than of the right; tongue is protruded straight forward; has a tumor on the left side of his neck, which extends from the mastoid process of the left temporal bone to the left clavicle, and seems to extend underneath the clavicle. It is four inches and a half in its transverse diameter, extending as far forward as the trachea and larnyx. Has a hard, irregular, nodulated feeling. The vessels on the upper half of the sternum, and over the upper half of the left side of the chest, and in the left axillary region are very much distended. Some degree of flattening on the left side of the chest.

Physical Examination. Expansion greater on the right side of the chest. Slightly impaired resonance at the apices of both lungs, but more on the left side. Mucous and submucous rales are heard over both sides of the chest. Sonorous and sibilant rales are also heard occasionally. Heart sounds normal. Hepatic and splenic dullness normal. Abdomen flattened; very tender to pressure, especially over epigastric and hypochondriac regions. All of the joints more or less painful on pressure or motion. Is able to walk a few steps, but causes him a great deal of suffering.

Appetite very poor. Tongue clear and moist. Bowels regular. Pulse 64; arteries slightly calcified. Temperature 98° F.

Ordered ℞. pulv. opii. grs. vj; potass. nitrat. ʒiss; pulv. gum guaiac, ʒj; M. ft. chts. No. xij. One to be given every three hours (by Dr. Davis).

November 30. States that he can not sleep at night on account of the pains in his limbs and bowels. Appetite poor. Tongue coated with a white fur, and dry. Bowels regular. Pulse 68. Temperature 98½° F. Coughs a great deal. Examined urine. Sp. G. 1020. Acid. Pale amber color. Nothing abnormal was found.

December 3. Cough is much worse. Expectoration is of a brownish color, and contains a few fibrinous casts. Tongue coated with a brownish fur, and dry. No appetite. Bowels regular. Pulse 64. Temperature 99° F. Treatment discontinued, and to have:

℞. Infus. cinchonæ ℥i, four times a day. Also, ℞. chloral. hydrat. grs. xv, at night, and during the day if necessary.

December 4. Has the diarrhea to-day, commenced during the night. Four stools last night—two to-day. Stools of a dark-brown color, thin and watery. No straining when at stool. Still complains of the pain in his bowels. Ordered ℞. bismuth subnitrate, grs. xxx; tinct. opii. gtts. x; to be given every three hours. Other treatment to be continued.

December 5. Three stools during the past twenty-four hours. Stools more natural. Is very weak. Pulse 100, very feeble. No appetite. Allowed one bottle of ale a day. Treatment continued.

8:30 A. M. Temperature 1¼° higher on the left side of the face, than on the right. Temperature right side of mouth, 95° F.; temperature left side of mouth, 95° F.; temperature under the tongue, 96° F.; temperature right axilla, 99½° F.; temperature left axilla, 98° F.

2 P. M. Temperature 2° higher on the left side of the face than on the right. Left side of the face dry and warm. Right side cool and moist.

Temperature left side of the mouth, 96° F.; temperature right side of the mouth, 97½° F.; temperature under the tongue, 98° F.; temperature left axilla, 97½° F.; temperature right axilla, 98° F. Pulse 88.

Is delirious at times for a few minutes, and then becomes perfectly rational. Articulation indistinct. First commenced to be so last night.

December 6. One stool during the past twenty-four hours. Still continues to be delirious at times. Stopped bismuth and laudanum. More moisture on the right side of the face, and the wrinkling on the left side of the forehead still continues.

Temperature 1¼° higher on the left side of the face; no difference in the two sides of the mouth. Temperature right axilla, 99½° F.; temperature left axilla, 98° F.

Left pupil was dilated with sulph. atropia. An ophthalmoscopic examination was made to-day by Dr. S. C. Ayres, but nothing abnormal was found. Tracheal sounds are transmitted toward the left side of the chest.

December 7. Temperature 2° higher on the left side of the face; temperature right axilla, 99¾° F.; temperature left axilla, 98° F.

More delirious than yesterday. Articulation more indistinct. Occasionally picks at the bed-clothes. Some degree of stupor. No appetite. Bowels regular. Pain in bowels still continues.

December 8. Temperature 2° higher on the left side of the face; temperature right axilla, 99° F.; temperature left axilla, 97½° F.; temperature both sides of the mouth, 96½° F.; pulse 100.

Delirium increasing. Articulation more indistinct than yesterday. Accuses the other patients of stealing his watch. Keeps his ale bottle in his bed, and keeps asking for more beer. Left pupil is still dilated from the atropia.

December 9. Is much weaker to-day. Still delirious. Stupor has increased very much since yesterday. When asked a question, does not answer it readily. Right pupil contracted, but active. Left one remains dilated.

Temperature 1½° higher on the left side of the face; temperature right axilla, 99½° F.; temperature left axilla, 97° F.; pulse 100, small and feeble; respiration 18, slightly labored.

Stopped ale and chloral; continued mf. cinchonæ. Ordered ℞. carbonate ammonia, grs. x; spts. frumenti, ʒi; to be given every two hours.

December 10. Wrinkling of the left side of the forehead increased. Mouth is drawn to the left side. Tongue when protruded is turned toward the left side. Stupor increasing. Left pupil remains dilated. Right one active. Pulse 120, very feeble.

Temperature 1° higher on the left side of the face; temperature right axilla, 100° F.; temperature left axilla, 98¾° F.

December 11. Temperature 1½° higher on the left side of the face; temperature right axilla, 99¾° F.; temperature left axilla, 99° F.

Pulse 100, very feeble. Lies in a semi-comatose condition. Passes urine and fæces involuntarily. Keeps up a low muttering delirium all the time.

6 P. M. Got out of bed and walked about twenty feet, then

walked back to his bed and lay down again. Then passed into a comatose condition and continued so until he died.

December 12. Died at 6 A. M.

Necroscopy made by Dr. Edward Rives, nine hours after death. Rigor mortis well marked. Considerable emaciation of the body.

Brain. Upon removing the calvarium the anterior portion of the membranes are found corrugated, and anterior portion of brain flattened. Middle and posterior portions of membranes distended with subarachnoid fluid containing lymph. The hemispheres of the cerebrum are glued together in the longitudinal fissure. The vessels of the brain are everywhere injected.

Neck. Has a tumor on the left side of the neck, extending from the mastoid process of the left temporal bone and filling up the angle of the jaw to the sterno-clavicular articulation, and dipping underneath the clavicle. An accidental section being made, about two ounces of a yellowish white fluid escaped from a sac on one side of the mass. The mass extended down beneath the left clavicle, pressing upon the vessels in that region, and was also found to have a close connection with the œsophagus and trachea, and pressing down upon the vertebral column. The parotid gland seemed to be healthy. The entire mass was removed with the trachea, œsophagus, and vessels.

Lungs. Apices of both lungs contained some fibrous indurations, rather circumscribed. Large amount of pigmentary substance throughout both lungs. A few scattered deposits in the left lung of a yellowish white aspect, and dark center. Lower portion of lungs crepitant throughout.

Heart. Pericardium firmly adherent to the walls of the heart by old adhesions. Walls of both ventricles somewhat thickened. Mitral valves somewhat thickened but apparently competent. Semilunar valves also somewhat thickened.

Stomach. Pyloric extremities of the stomach infiltrated and thickened with the same deposit as found in the lungs. Was attached to the vertebral column.

Liver. Weight, four pounds. Diameters, transverse, ten inches; anti-posterior of right lobe, eight inches; thickness, three inches. External surface of the liver studded over with nodules of a whitish color, and having a hard indurated feel. Nodules umbilicated and flattened at their summits, varying in size from a small pea to as large as a silver half dollar.

Spleen. Capsule infiltrated with the same deposit as found in the lungs and liver. At the points where the deposits are situated, the capsule is thickened and easily detached.

Kidneys. Right, 4½ by 2½ inches; thickness one inch. Capsule easily detached. On section, substance normal.

Left kidney about the same as right one.

Intestines normal. Mesenteric glands very much enlarged.

Microscopical examination made by Henry Richmann, Esq., of the Cincinnati Hospital.

Examination of the fibroid masses found in the apices of the lungs shows an increase of fibrous tissue. Thickened alveolar walls and some considerable number of epithelial cells here and there. Examination of the fluid found in the cyst situated in the tumor of the neck shows a large number of granular corpuscles; other corpuscles with nuclei more or less granular and varying in size and shape.

Chloride of Potassium in Epilepsy (Echo Med. et Pharm. Belge).—Dr. Lander advocates this salt as better than bromide of potassium in epilepsy. He finds it is more active, costs five-sixths less, and has not the inconvenience of the secondary effects of bromide of potassium. He begins with small doses, and has continued the use of the drug for several months without any bad consequences, in daily doses of from 3 grammes 50, to 5 grammes 50 (1 to 2 drachms). Moreover, Dr. Lander thinks that the bromide is converted into a chloride in the stomach, so he suggests the immediate use of the chloride.

Enormous Brain in a Boy.—The *British Medical Journal*, of October 19, says: "A boy thirteen years of age died in the Middlesex Hospital, a few days since, from injuries caused by a fall from an omnibus. His brain after death was found to be very large, and to weigh fifty-eight ounces, about eight ounces above the weight of the average male adult brain. He had been a particularly healthy lad, without any evidence of rachitis, and very intelligent."

Correspondence.

CEREBRO-SPINAL MENINGITIS.

NORTH LEWISBURG, O., *November* 20, 1872.

As cerebro-spinal meningitis continues to be so far irremediable, that no well-defined course of treatment is as yet agreed upon, its importance entitles it to all the light that can be thrown upon the subject, I send you the following:

The disease never having prevailed epidemically in this vicinity, my experience has been limited to two sporadic cases, and I write this article, hoping, if it meets the approbation of others with more extended opportunities, it may have the effect (in the absence of better things) to further test the suggestions herein contained.

Having read, through medical journals, etc., accounts of epidemics in various localities during the rebellion, and up to 1867, together with the results of treatment by the physicians of the different localities, I concluded that the mode of treatment indicated by the pathology of the disease, as well as by the results of treatment, should have for its object relief of the congestion of the brain and spinal cord with their meninges.

Internal medication being very inefficient and unsatisfactory, as evinced by the variety of remedies that had from time to time been lauded as highly beneficial, and as often abandoned as inert, little was to be hoped for from that source.

Vesication along the spine had afforded temporary relief, the good effects continuing only for a time, the congestion of the nerve centers recurring sooner or later, the surface through which relief had been afforded being in such condition as to forbid its early repetition, the diseased action returning with renewed violence, marching on almost unimpeded to a fatal or serious result.

Cupping, therefore, seemed to be the most rational mode of affording relief, the skin remaining intact, it could be repeated at will whenever occasion required. Believing that the beneficial effects of this agent were often not realized as they might be in deep-seated congestion by depending upon the ordinary-sized cupping-glasses, whose action was altogether too feeble for use in adults, except about the cranium, I procured a large cupping-glass, three inches in diameter at its mouth, while cerebro-spinal meningitis was prevailing in adjoining counties, and thus provided I felt brave to attack the monster, should I be called to any cases and have opportunity so to do, all of which came to pass as follows:

February 26, 1867, 9 A. M. I was called two miles in the country to see Mrs. E., widow, aged 30, of nervous temperament and rather delicate health. Learned that she had been riding out a day or two previous and exposed to the weather, which was quite damp and cold, and on the night previous had become chilly and remained so at the time of my visit when exposed to the atmosphere. Pulse 90; constant nausea; pain in stomach; had vomited for twelve hours everything taken; tenderness of epigastric region, with severe headache.

I considered it an attack of congestion of stomach. Prescribed morphia sulph. in small doses, with ice and sinapisms, to be used freely over epigastrium, and left, promising to call next morning at 9 o'clock.

February 27. At 6 o'clock in the morning, a messenger informed me that she had been constantly growing worse. On my arrival, I found her writhing in agony, bathed in cold perspiration; pupils dilated; flexors of fore-arm contracted; fingers drawn tightly down upon the palms of the hands; respiration laborious; constriction about the glottis, as well as the muscles of chest, interfering with deglutition; speech indistinct; had vomited everything taken since my visit; crying frantically (as best she could) for help to relieve the pain in her head, which she said was drawing like a band tightly over vertex; sharp pain extending into temporal and occipital regions; pulse feeble and irregular.

I soon decided that I had to deal with a case of cerebro-spinal meningitis. But in the presence of this frightful stare and touching appeal to me for relief, I felt *less* brave than when sitting in my office combating an imaginary case. Accordingly, sent a messenger for my friend, Dr. S., of Mingo, Ohio, who had treated a number of cases at a former location in Logan county, Ohio. Proceeded to apply a bladder of pounded ice to the head. Dr. S. arriving, agreed as to the nature of the difficulty; expressed to him my confidence in counter-irritation by large cupping-glasses over the spine. He assented, seeming, however, to have little confidence in any course.

In the absence of my glass, we proceeded to apply the common glass tumblers in use about the house, in the form of dry-cupping, with great relief to the paroxysm, relieving every symptom, more or less, and rendering her comparatively comfortable.

This amelioration of her symptoms continued for several hours, when a paroxysm returned. I was sent for, and with the glass I had procured, hastened to the house, and applying it for several moments, commencing as high up on cervical region as the surface would permit, and repeating along down over spinal column, the edge of the glass each time touching the lower edge of the ring formed by the previous application, thus including in the process all the surface over the spinal column; the width of the glass, again relieving the paroxysm more decidedly than with the common glass used during the first paroxysm.

After one or two days, in addition to the above symptoms, with the return of the paroxysms she became opisthotonic; the head drawn back resting on head and heels, or lying on her side bent backward in the form of a half circle, the muscles of the abdomen rigid and very tender to the touch.

The recurrence of these paroxysms taking place from one to four times every twenty-four hours, and was relieved each time by the thorough application of the cup along the spine, as above described.

The family, after a few days, learned to make the application, and as soon as she felt the returning paroxysm would call anxiously for it to be applied. Commencing over the lower cervical vertebra, and repeating as above described, would in regular order relieve the constriction about the glottis, cramping in the hand, contraction of diaphragm, abdominal muscles and muscles of lower extremities. Opisthotonos subsiding, would express herself relieved, often adding, "I can never live through another of those spells."

Frequently becoming delirious during the paroxysm, she would afterward remark: "Oh, dear! how good I felt when I came to and found you cupping my back. If you put it off so long next time I will surely smother," etc.

The region involved in the repeated cupping became very much ecchymosed and quite sensitive when not under the influence of a paroxysm, on the return of which, she disregarded even considerable heat from the burning taper used in applying the glass.

Although the nurses attained considerable skill in the application of the cup, yet, on feeling the returning paroxysm, she would request them to send for me, and sometimes being absent. I would not arrive for an hour or two, and would usually find the paroxysm partially controlled. On a few occasions, however, the appearance of the patient was so alarming, that they had desisted from any effort to relieve her, and given up all hopes, and it devolved upon me to afford relief, giving opportunity to try sinapisms, friction, ice to the spine, smaller cups, etc., all of which *always* failed.

Now to recapitulate, for the purpose of giving prominence to a few points worthy of more elucidation in this article.

On account of frequent recurrence of vomitting and lack of confidence in remedies, they were abandoned almost entirely, and can claim no part in the results in this case. The patient's intellect did not become so far impaired as to prevent her dictations and expressions aiding very much in the treatment.

Her own opinion, with that of the friends and persons present, concurred that the cupping, as resorted to so frequently, prevented her disease progressing into a much more permanently aggravated form.

Cupping glasses of ordinary dimensions were used as a trial, and proved totally inefficient.

The large glass, when used with folds of paper, or cotton dry, would not answer the purpose so well as when they were dipped in alcohol before being lighted. While used in this way, the revulsive effect could be made sufficient to subdue the congestion at the roots of the various pairs of nerves given off from the spinal cord, and thus relieve the paroxysm in all the organs and parts supplied by those nerves.

Ice to the head proving very doubtful in its effect, was mostly abandoned, and although *intense* pain was referred to the frontal and occipital regions, cold to the head would fail, and counter-irritation to the spine would relieve.

This case was so obstinate that, on the 18th day of March, twenty days from the onset of the disease, she was at her worst. Nourishment, consisting of beef-tea, a portion only of which had been retained, had been used throughout, and from this date she convalesced so rapidly, that, on the 22d of March, I ceased to visit her, and with an occasional cupping along spine by the family, and tonics mainly of ferruginous preparations.

The best evidence I have of the success of counter-irritation, as thus used, is that my patient soon recovered without the impairment of any function, and to-day lives in the enjoyment of health as good as before. A. L. WILLIAMS, M. D.

BURLINGTON, KAN., *November* 14, 1872.

Editor Lancet and Observer: By giving the following an insertion in your valuable paper, you will confer a favor upon the profession I trust, as well as the undersigned:

A MOST REMARKABLE CASE.—At about one o'clock on the morning of November 10, 1872, I was called to visit Miss ——, a Welsh girl, who was said to be in a critical condition. On arriving at the house, I found Dr. R. D., a physician of the eclectic school, and Dr. J. D., a physician of the homeopathic school, both distinguished in their respective systems of practice. I met Dr. J. D. in an outer room. I asked him the nature of the case, and he informed me that it was a bad case of *hernia;* that the *intestines of the girl were protruding through the vagina more than six inches*, and that he was going in quest of a "dilator." My notions of anatomy were somewhat upset, but I, nevertheless, went into the sick-room and prepared to make an examination of the case. I found the alleged intestine carefully wrapped in cloths saturated with warm water to prevent its being chilled. I unfolded the cloths, and the protrusion was even longer than had been represented. I very carelessly left the cloths unfolded and the protrusion exposed. At this time, Dr. J. D., having searched the town through for a "dilator," returned, accompanied by Dr. M., the leading physician and surgeon of the allopathic school in the country. Dr. M. had with him a bivalve speculum and other instruments, and after having kindly explained the use of the instruments, proceeded to examine the case for himself. He gazed long and anxiously at the aforesaid protrusion, and pronounced his diagnosis in the plain and expressive words, "A gut, by God." He then made an examination by vaginal taxis, and also examined the rectum with a view of discovering at what point the intestine entered the vagina. He then introduced his hand into the vagina, and carrying it well up into the os uteri, which was well dilated, found a fœtus. It being a footling presentation, the woman was delivered of a dead child by Dr. M. and myself, by the ordinary means in such cases used, and is now doing well.

I have headed this "A most Remarkable Case." The reader will probably discover where the "remarkable" part comes in.

Very truly,

W. T. WISEMAN, M. D.

Editorial.

Sooth. Beware the ides of March!
Cæsar. What man is that?
Brutus. A soothsayer bids you beware the ides of March.—*Julius Cæsar.*

Now, that we have entered February, and the first of March is not far distant, we presume that we may congratulate the many learned professors of the numerous medical colleges of this city, on the termination of their arduous labors. The *amount of erudition* required of a first-class professor is something *immense;* when one thinks of the number of lectures to be *compiled*, of the tremendous expenditure of *vocal power* required in delivering the same, he can only wonder in mute astonishment why so many men become professors. In this city alone we have *only about fifty*, and these fifty are all *great men;* at least they think so themselves, and we shall not endeavor to convince them to the contrary; that, indeed, would be a useless task. However, as we said before, we congratulate the noble band of professors that the *last lecture* is soon to be delivered, and we know that the students will be happy on hearing *that last lecture.* "Beware the ides of March!" Every student who intends graduating is just about this time preparing for his final examination. We can see him, *in imagination*, poring over some ancient and musty tome by the light of a tallow dip; his manly forehead bears the impress of four dirty fingers—evidently he has been leaning his weary head on his sooty hand; but no! has he been endeavoring to *auscultate* the unsuspicious chambermaid? Perhaps! These young and scientific gents believe in going to the bottom of everything. A knock is heard at the door—three students enter each with a book in hand; chairs are arranged in a circle around the table, a large black bottle marked *poison* is produced from some mysterious locker. Perhaps this is a "quiz" on toxicology. Each man, at any rate, takes a swallow, and as "one swallow does not make a spring," on this theory it is, we suppose, that they all take several. Be it as it may, however, a glow of contentment and extreme felicity overspreads each classic feature; pipes are produced, and soon the room is filled with delicious odors of "killikinick." Where before we only heard the low hum of voices, we now hear loud and excited conversation. Questions inumerable are answered, correctly or incorrectly as the case may be; and ever and anon the shadow of the black bottle is reflected against the cloud of dense smoke, while hands and heads bob about in the haze, like figures at a puppet show. The round, full-faced moon smiles right jollily as it peeps into the student's garret window, and could it whisper to you, it would say, "This is 'our' students' preliminary *grind*, *cram*, *fill up*, or whatever you may choose to call it." "Beware the ides of March!" Alas! poor student, you little know what a bugbear these final examinations are. Are you in doubt as to the result of that *final examination?* We doubt very much whether five men have been *rejected* in as many years in this city. Will you pass? We answer you, certainly. Why, last winter, or rather last spring, one of the numerous colleges in this city conferred their degree *in honoriam* upon an individual who vends a "*diuretic mixture*," which will cure almost any disease, if we are to believe the statements on the bottle. If a man who *advertises* can receive a diploma *without passing an examination*, what have you to fear? Our colleges all wish to swell their graduating list; hence, have no fears. "*Copper*" your last dollar on the result. You have four aces, "go in," and "take the pot;" also the LANCET AND OBSERVER; terms $3 per annum, *invariably* in advance.

Cincinnati Hospital.—The *concours* examination of applicants for the position of resident physician at the "Cincinnati Hospital" is finished. There were four vacancies to fill, and nine students competed for the four positions. All the gentlemen who applied for the place are said to have passed excellent examinations. Two "Miami College" men, *i. e.*, Messrs. Nelson and Zellner, one "Ohio College" man, *i. e.*, Mr. Ransahof, and one "Cincinnati College" man, *i. e.*, Mr. Amick, were the successful candidates. We congratulate the "victors," and hope the "defeated" will have better luck next time. It really does seem as though we had one place in the city where *real merit* has a fair show. This examination, we believe, was fairly conducted, and the fact that at least *one* student *from each college* secured a place, certainly indicates that *no one college clique* is in the ascendency, as was formerly the case. The "staff" of the "Cincinnati Hospital" are at least honest, and we can only say to them, that they have won the esteem of every fair-minded physician in this community by the honorable course they have pursued in this matter. *If we must have a surplus of colleges*, let us treat them all fairly at least.

Reviews and Notices.

The Principles and Practice of Surgery. By Prof. F. H. Hamilton, M. D.

The science and art of surgery are in little danger of passing into oblivion at the present day, if printer's ink will save them. Within a few months we have had a new work on surgery by Dr. Ashurst, and a new edition of Prof. Gross' System of Surgery; and now we are called on to notice the book named at the head of this article. Where no actual want exists for a new book on any particular subject, it may be expected of the author of such book that he will present some new matter, or at least repeat the old in a somewhat improved style. The effort to give to such a work the appearance of newness or originality seems often strained. Thus, some authors seek to accomplish this object by giving special prominence to some pet topic, or by adopting some new arrangement of the contents of their books. One writer on surgery will commence with amputations for example, while another will discuss that subject in his closing chapter. If the book under notice discusses any subject with special prominence and fullness, it is certainly that of *arrow wounds.* Indeed the arrow-head is almost as conspicuous on Dr. Hamilton's pages as it is on the property of the British crown. So we may regard arrows and arrow wounds as the specialty in this work. First, we have a section devoted to arrow wounds, and containing illustrations of the arrows used by various tribes, etc. Next, we find the reparation process in bone illustrated with a cut showing a buffalo rib transfixed by an arrow-head. And lastly, the important subject of fractures of the cranium is embellished exclusively with two wood-cuts of arrow wounds of that part. This partiality ought to make Dr. Hamilton's work very popular with the " medicine men " of the Apaches and Medocs; but we hardly think arrow wounds are regarded as of so much practical importance as to favor its sale very much among surgeons in " The States." However, the book contains much more than " arrow wounds," and much that is excellent. Indeed, on the whole, it strikes us as being a very valuable addition to the literature of surgery, and, notwithstanding the formidable competition it has to encounter, well calculated to attain a fair degree of popularity. In one particular it will probably fail to give full satisfaction as a text-book for students—and that is the brevity and meagerness with which therapeutic instructions are generally given. Neither is it as well illustrated as other text-books. As a book of reference for the practitioner, it is open to the objections which may be urged against all works in which it is attempted to condense the whole subject of surgery within a single volume. But, perhaps, the various subjects could not be more satisfactorily epitomized than they are here. Whatever faults may be found with it, that of being a mere imitation of other books can not be charged against it. Indeed, it is distinctively an American work; and, perhaps, herein it is most open to criticism, in that it does not incorporate more of the views of European authorities, especially in the department of pathology. Finally, we can not say too much in praise of the very beautiful style in which the book is printed—both type and paper being of the very best.

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Died.—At the residence of his brother-in-law, J. W. Yowell, Esq., January 5, 1873, *W. C. McBride*, aged twenty-eight.

At a meeting of the class of the Miami Medical College, held January 13, 1873, the following resolutions were adopted:

Whereas, God in His divine wisdom has removed from our midst our friend and fellow-student;

Resolved, That in his death we have lost one of our most exemplary classmates; his family a kind, affectionate, and devoted member, and the community an esteemed and valued citizen.

Resolved, That while we deeply mourn his loss, and tender our heartfelt sympathies to the bereaved and sorrowing relatives, we have nothing of this world's consolation to offer, and can only add that He who "tempers the wind to the shorn lamb," looks down with infinite compassion upon the afflicted in the hour of their desolation.

Resolved, That a copy of these resolutions be sent to his family and be published in the city and county papers, and also in the medical journals of this city.

W. C. CHAPMAN, *Ch'm.*
G. W. REED,
FORDYCE GRINNELL,
JAMES K. POLLICK,
L. A. SHEPARD,
WILLIAM JUDKINS, *Sec'y.*
Committee.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

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Original Communications.

Art. I.—Lecture Notes on Putrefaction, Fermentation, and Disinfectants.*

By SIDNEY A. NORTON, Professor of Chemistry in the Miami Medical College.

THE NATURAL CHANGES OF INORGANIC SUBSTANCES.

Many inorganic substances exposed to the joint action of air and moisture undergo chemical transformations.

1. More complex substances are formed. The common metals are oxidized, as $2Fe+3O=Fe_2O_3$; ferrous oxide becomes ferric oxide. $2FeO+O=Fe_2O_3$.

2. Water is assimilated and forms hydrates, as quick-lime is air-slacked. $CaO+H_2O=CaH_2O_2$.

3. Water is decomposed, the oxygen assimilated, the hydrogen set free. This hydrogen, being in the nascent state, has its affinities in the highest condition, and is capable of entering into combination even with the inert nitrogen of the air to form ammonia. $2Fe+3H_2O+Air=Fe_2O_3+2H_3N$.

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*These are notes of three lectures recently delivered before the class. They are enlarged in some places, so as to make them more readable. The apology for printing them is simply that they are believed to contain a large number of facts, conveniently arranged.

4. The decomposition and assimilation of water may take place at the same time. This occurs especially in dilute solutions. Thus stannic chloride is changed to meta-stannic acid and hydrochloric acid is formed. $5SnCl_4+15H_2O=Sn_5H_{10}O_{15}+20HCl$.

5. When no other substance is present in the liquid which can combine with the hydrogen that is set free, this hydrogen unites with the oxygen absorbed from the air. Hence, in many cases, the presence of the air is essential, and these decompositions do not take place in liquids from which the air has been removed and excluded. Thus the decomposition of a solution of hydrogen sulphide, H_2S, is prevented when the air is completely excluded.

6. Bodies which readily decompose are called unstable compounds. The general tendency is the decomposition of complex molecules into two or more simpler molecules, or into compounds which are more stable under ordinary circumstances. Most unsaturated compounds are unstable; as, FeO; $FeCl_2$.

7. There are some inorganic compounds which are so unstable that very slight causes effect their decomposition. Thus hydrogen peroxide decomposes into water and oxygen. Chlorous anhydride and perchloric oxide are dangerously explosive.

8. It is a general law that nitrogenous compounds are exceedingly prone to decomposition; as, nitro-glycerine, gun-cotton, the fulminates, nitrogen chloride, nitrogen iodide, etc.

9. It is noticeable that the presence of a third body sometimes strikingly modifies the chemical relations between two other substances.

(A) The third body enters into direct combination with the other two. Thus carbon and nitrogen do not unite directly; but if an alkali is present when carbon is strongly heated in a blast of air, a cyanide may be formed; as KCN. (Charcoal furnaces.)

Oxygen and chlorine do not unite directly, but chlorine will unite with oxygen when it has been previously combined with a metal. Thus the oxysalts of chlorine are prepared by passing chlorine gas over the metallic oxides; from these the anhydrides of chlorine are obtained.

(B) Two bodies unite when they are in contact with a third body which is undergoing a similar chemical transformation. Thus pure copper does not dissolve in dilute sulphuric acid; but when alloyed with zinc, it dissolves readily along with the zinc. So also, nitrogen combines with oxygen when a jet of hydrogen is burned in the air.

(C.) The chemical transformation of a compound may be brought about by a substance which (1) remains unaltered, or (2) is itself undergoing a different change. This sort of action is conveniently spoken of as catalysis, or contact action.

Thus platinum sponge and some other finely divided substances may cause the rapid oxidation of hydrogen into water, of ammonia into nitrous acid. This may be explained by the property which platinum possesses of condensing large quantities of oxygen upon its surface. So also, charcoal causes the rapid oxidation of hydrogen sulphide.

The second form of catalysis is chiefly observed in the transformation of organic compounds.

Thus, if germinated barley is suspended in warm water, and starch be added, the starch is converted first into dextrin and then into glucose.

$$\underset{\text{starch.}}{2(C_6H_{10}O_5)_3}+\text{diastase}=\underset{\text{dextrin.}}{3(C_6H_{10}O_5)_2}$$

$$\underset{\text{dextrin .}}{(C_6H_{10}O_5)_2}+2H_2O+\text{diastase}=\underset{\text{glucose.}}{2(C_6H_{12}O_6.)}$$

In this case it is supposed that the gluten of the barley contains a peculiar substance called diastase; that this diastase, while suffering decomposition, is enabled to set up chemical changes in the starch, whereby it is converted into dextrin and glucose.

Substances which, like diastase, have the power of inducing chemical changes in organic compounds, are called ferments.

10. It is an error to suppose that ferments are necessary in all, and perhaps even in most cases of organic transformations and transmutations. In fact, many of them are exactly analogous to those already noticed in inorganic compounds. Thus, an aqueous solution of ammonium cyanate, when left to evaporate spontaneously, is converted into urea. $NH_4CNO=COH_4N_2$. Urea, when boiled with water, assimilates a molecule of water, and breaks up into carbonic anhydride and ammonia.

$$\text{Urea, } COH_4N_2+H_2O=CO_2+2H_3N.$$

So also, starch may be converted into dextrin by a gentle roasting; into dextrin and then into glucose by warm dilute sulphuric acid—the sulphuric acid remaining meanwhile apparently unchanged.

So also, the oxygen contained in the pores of platinum black is capable of converting alcohol first into aldehyde, and then into acetic acid, and so rapidly that it is used as a manufacturing process.

$$C_2H_6O+O=C_2H_4O+H_2O.$$

alcohol. aldehyde.

$$C_2H_4O+O=C_2H_4O_2.$$

aldehyde. acetic acid.

So also, an aqueous solution of cyanogen is converted into oxamide by the presence of a trace of aldehyde.

$$2CN+2H_2O+C_2H_4O=C_2H_4N_2O_2+C_2H_4O.$$

cyanogen. aldehyde. oxamide. aldehyde.

So also, many of the compounds which are regarded as the peculiar products of fermentation may be formed by synthesis. Thus, when coal gas is burned in a limited supply of air, acetylene is produced (C_2H_2). Acetylene, in presence of nascent hydrogen, becomes ethylene, C_2H_4, and ethylene, shaken up with strong sulphuric acid, becomes alcohol. C_2H_6O.

Even the property of isomerism is not confined to organic compounds. Well-marked examples are found in the chromium sesquioxides, in silicic acid and other substances.

11. Nevertheless, by reason of the greater complexity of their molecules, organic compounds are more unstable than inorganic. That is, they have a greater tendency to become transformed into two or more other compounds which are of greater stability.

In these transformations ferments undoubtedly play an important role.

THE NATURAL CHANGES OF ORGANIC SUBSTANCES.

12. Only three groups of organic substances need be considered:

(1) *The hydrocarbons.* These bodies contain only hydrogen and carbon; as, marsh gas, CH_4, and its homologues, petroleum and paraffin; the essential oils, as turpentine. $C_{10}H_{16}$.

The fats and fatty acids contain small quantities of oxygen; as, stearic acid. $C_{18}H_{36}O_2$.

(2) *The starch and sugar group.* These bodies contain carbon, hydrogen, and oxygen: the two latter frequently in the same proportion in which they are combined in water. $C+(H_2O)y$. Thus:

Cellulose, starch, and gum are $(C_6H_{10}O_5)n$.

Glucose and galactose are $(C_6H_{12}O_6)n$.

Cane and milk sugar are $(C_{12}H_{22}O_{11}.)$

These two groups are spoken of collectively as non-nitrogenous bodies. When in the pure state they do not decompose under ordinary circumstances. The rancidity of the fats, the moulding of starch and sugar may generally be traced to the decomposition of some foreign matter, which has acted like a ferment.

(3) *The nitrogenous group*, CHON. These bodies are characterized by the complex structure and the remarkable instability of their molecules (8). The principal types are:

(1) Albumin, as white of egg and blood serum.

$$C_{72}H_{118}N_{18}O_{22}S+H_2O\,?$$

(2) Albuminoids; as, vegetable albumin (the portion of wheat flour soluble in H_2O); animal casein; vegetable casein, or legumin; animal fibrin, from lean flesh; vegetable fibrin, from the portion of gluten which is insoluble in alcohol. (This yields diastase.)

(3) Gelatin, animal $C_{47}H_{67}N_{13}O_{16}$ (from cartilage, etc.) Vegetable, found in the gluten of wheat (along with legumin), in the portion which is soluble in alcohol.

All these are colloid bodies. In the living body their existence is a continual metastasis. They are the plastic elements of growth. In dead tissues they are the first to undergo decomposition.

13. When organic substances are exposed to the joint influence of air and moisture, they are liable to undergo changes which have been grouped in three classes: (1) Eremecausis, or slow decay. This is generally a slow oxidation. (2) Putrefaction, or rotting, is the rapid decay of nitrogenous substances. (3) Fermentation is the decay of non-nitrogenous bodies.

14. Putrefaction and fermentation are further characterized by the nature of the new products. (1) In putrefaction, the new products have frequently an offensive odor, due to H_2S, H_3P, H_3N, or to certain volatile bodies of unknown composition. (2) In fermentation no offensive odors are evolved (CO_2), and the new products are frequently useful, as alcohol, acetic acid.

In eremecausis there is frequently both putrefaction and fermentation, but modified by the exceeding slowness of the change, as when a log rots in the woods.

15. None of these forms of decay take place:—(1) When the air is excluded. Wood imbedded in peat mosses remains unaltered for years. (2) When perfect dryness is maintained. The wood of Egyptian coffins has been preserved by a tolerably dry air. The Peruvian mummies dry, but do not decay. "Jerked beef." (3) At the temperature of freezing water. Thus, frozen fish and meats are marketable for a long time. The Siberian

mammoth, imbedded in ice, was found, after an unknown period, referrible to geologic time. (4) At the temperature of boiling water. Albumin, coagulated by boiling, does not putrefy except after a long time. So also fruits and meats, boiled and then hermetically sealed, remain unchanged for years.

16. Therefore. in order that any of these processes of decay may begin, there is required: (1) the presence of the air; (2) the presence of water (strong solutions are thought to be favorable to putrefaction, dilute solutions to fermentation); (3) a moderate temperature, the most favorable being between 20° C and 40° C.

17. It is a matter of question whether the air is necessary to continue a decay which has once well begun. It is, however, stopped by freezing, boiling, or drying the substance.

18. Under the conditions specified, most nitrogenous substances, like gelatine and the albuminoids, putrefy apparently spontaneously—at any rate, without the addition of any substance known to be a ferment. Such bodies are called putrescible substances.

Nevertheless, all nitrogenous bodies are not putrescible. Thus horn and hard-boiled albumen are quite stable. The alkaloids are non-putrescible. Amygdalin and indigo are fermentable substances.

On the other hand, non-nitrogenous substances do not putrefy, but many are fermentable substances. That is, they are capable of entering into fermentation only when in contact with a ferment.

19. The ferments are nitrogenous substances:

(1) Albuminous and gelatinous bodies, which generally require to be in the state of putrefactive decay, as leaven, diastase, emulsin, synaptase, pectase, the "washings of yeast plant," mucus. (Pepsin.)

(2) Certain living organisms, (*a*) mycoderms=vegetables; as the yeast plant=torvula cerevisiæ, penicillium glaucum, mycoderma aceti; and infusoria=animals; (*b*) as bacteria, monads, mucors, mucedinæ.

The first may be regarded as acting, because they are unstable compounds; the second, because (*a*) either they induce the formation of such unstable compounds, or (*b*) because they decompose the fermentable substance by the physiological process of growth.

20. The kind of fermentation induced varies either with the state or the kind of ferment, and receives its name generally from the product formed, as:

1. Saccharine. $\underset{\text{starch.}}{(C_6H_{10}O_5)_3}+\text{diastase}+3H_2O=\underset{\text{glucose.}}{3(C_6H_{12}O_6.)}$

$$\underset{\text{cane sugar.}}{C_{12}H_{22}O_{11}}+H_2O+\text{yeast}=\underset{\text{glucose.}}{2(C_6H_{12}O_6.)}$$

2. Alcoholic. $\underset{\text{glucose.}}{C_6H_{12}O_6}+\text{yeast}=\underset{\text{alcohol.}}{2(C_2H_6O)}+\underset{\text{carbonic anhydride.}}{2CO_2}.$

3. Acetic. $\underset{\text{alcohol.}}{C_2H_6O}+2O+\text{mycoderma aceti}=\underset{\text{acetic acid.}}{C_2H_4O_2}+H_2O.$

4. Lactic. $\underset{\text{glucose.}}{C_6H_{12}O_6}+\text{penicillium glaucum}=\underset{\text{lactic acid.}}{2(C_3H_6O_3.)}$

5. Butyric. $\underset{\text{lactic acid.}}{2(C_3H_6O_3)}+\text{infusorium}=\underset{\text{butyric acid.}}{(C_4H_8O_2)}+2CO_2+4H.$

6. Mucous. $\underset{\text{cane sugar.}}{25(C_{12}H_{22}O_{11})}+13H_2O=\underset{\text{dextrin.}}{12(C_6H_{10}O_5)_2}+$

$$\underset{\text{mannite.}}{24(C_6H_{14}O_6)}+12CO_2.$$

7. Salicylic. $\underset{\text{salicin.}}{C_{13}H_{18}O_7}+H_2O+\text{emulsin}=\underset{\text{glucose.}}{C_6H_{12}O_6}+\underset{\text{saligenin.}}{C_7H_8O_2}.$

Fermentation of nitrogenous substances:

$$\underset{\text{black mustard.}}{C_{10}H_{18}KNS_2O_{10}}+\text{myrosin}=\left\{\begin{array}{l}\underset{\text{oil of mustard.}}{C_4H_5NS}+\underset{\text{acid potassium, sulphate.}}{KHSO_4}.\\ +\underset{\text{glucose.}}{C_6H_{12}O_6}.\end{array}\right.$$

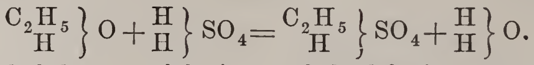
$$\underset{\text{amygdaline.}}{C_{20}H_{27}NO_{11}}+2H_2O+\text{emulsin}=\left\{\begin{array}{l}\underset{\text{benzoyl, hydride.}}{C_7H_6O}+\underset{\text{hydrocyanic acid.}}{HCN}+.\\ \underset{\text{glucose.}}{C_6H_{12}O_6}.\end{array}\right.$$

$$\underset{\text{urea.}}{COH_4N_2}+2H_2O+\text{mucus}=\underset{\text{ammonium, carbonate.}}{(NH_4)_2CO_3}.$$

21. There are two principal theories of fermentation:

(1) *Liebig's, or the physico-chemical theory.* This supposes that the fermentation of glucose, etc., is the result of a vibration which is communicated to its molecules by a motion previously existing in the molecules of some unstable substance produced by the yeast plant. The yeast plant is therefore not directly essential in alcoholic fermentation. The real ferment is the unstable substance which may be produced by the physiological process of its growth.

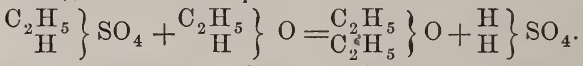
This view is supported (1) by similar so-called catalytic actions in inorganic bodies like those mentioned previously (9); (2) by similar phenomena in organic bodies, not referred to fermentation (10); (3) by the fact that analogous "sympathetic vibrations" are observed even in gross matter; as in pendulums and musical strings; (4) by the reasonable theory that all molecular forces are due to molecular vibrations, *e. g.* that all phenomena of chemical affinity are due to a constant motion maintained among the ultimate particles or atoms of bodies. Thus, the conversion of alcohol into ether by sulphuric acid (once referred to catalysis) is effected by the motions among the molecules, by which (1) the atoms of the two bodies interchange, to form water and ethyl-sulphuric acid.



$$\left.\begin{matrix}C_2H_5\\H\end{matrix}\right\}O+\left.\begin{matrix}H\\H\end{matrix}\right\}SO_4=\left.\begin{matrix}C_2H_5\\H\end{matrix}\right\}SO_4+\left.\begin{matrix}H\\H\end{matrix}\right\}O.$$

alcohol. sulphuric. acid. ethyl-sulphuric acid. water.

(2) The molecule of the ethyl-sulphuric acid, meeting with other molecules of alcohol, exchanges its ethyl radicle for hydrogen, producing ether and sulphuric acid.



$$\left.\begin{matrix}C_2H_5\\H\end{matrix}\right\}SO_4+\left.\begin{matrix}C_2H_5\\H\end{matrix}\right\}O=\left.\begin{matrix}C_2H_5\\C_2H_5\end{matrix}\right\}O+\left.\begin{matrix}H\\H\end{matrix}\right\}SO_4.$$

ethyl-sulphuric acid. alcohol. ether. sulphuric acid.

(3) The sulphuric acid is thus restored to its original state, and is ready to act upon fresh quantities of alcohol, and by this recurrence of changes is capable of converting almost unlimited quantities of alcohol into ether; at any rate, of continuing the transformations until the water formed renders the acid too dilute to maintain the vibration required.

Corresponding to this, a very small amount of yeast is capable of transforming a very large quantity of glucose into alcohol. Pasteur found that, while a given weight of yeast plant assimilated one milligramme of cellulose, three hundred and thirty-three milligrammes of sugar were transformed. This ratio seems enormous if the yeast plant is the only, or is directly the essential agent in fermentation, but is conformable to the examples cited if it is held that, by its growth, nitrogenous molecules are produced of unstable nature, and capable of setting up vibrations in the molecules of the glucose.

(5) The theory commends itself because of the analogous facts in the nutrition of plants and animals. That is, nutrition and fermentation are analogous processes, whereby chemical affinities,

suitably modified, result in the production of new bodies from colloid nitrogenous bodies and from fermentable substances.

22. *Pasteur's or the germ theory.* This supposes that neither true putrefaction nor true fermentation can take place without the direct intervention of living organisms, viz., infusoria and mycoderms, and that each organism sets up a peculiar kind, either of putrefaction or of fermentation.

He finds (1) in a putrefying liquid the first developed are infusoria (bacteria and monads) which consume oxygen and evolve carbonic anhydride; (2) that when the oxygen is completely absorbed, vibrios are found which consume carbonic anhydride and evolve oxygen, and therefore are killed by the presence of oxygen; (3) that when the putrefying liquid is exposed to the air both processes go on continuously, the bacteria forming a film whereby the vibrios are protected from the action of the air.

He regards (1) the yeast plant as the essential element in alcoholic fermentation. (2) It assimilates a portion of the sugar into the form of cellulose and fat, and obtains the nitrogen necessary to its growth either from the albumin present in the liquid or from the soluble albumin in its own cells.

He also regards ermecausis as due to certain lower organisms, without whose intervention dead organized substances would be practically indestructible.

The tendency is to adopt his views, partly because they harmonize with the general notions of the times, and partly because of his wonderful researches in regard to the disease of the silkworm (caused by pebrine). Nevertheless, to these views it is objected, (1) that such special ferments have no existence. (2) That the same ferment may induce several kinds of fermentation, thus the yeast plant can resolve calcium malate into calcium acetate, succinate, etc. (3) That infusoria live only in neutral or alkaline liquids, and that mycoderms live only in acid liquids, and hence, that the presence of one or the other of these forms is contingent upon the reaction of the liquid. (4) That carbonic anhydride is not essential to the growth of infusoria. (5) That in many undoubted cases of putrefaction, no infusoria can be detected, or they do not appear until putrefaction is well established. (6) The results of fermentation may be obtained by purely chemical processes.

23. As regards the living organisms which are observed in putrefaction and fermentation.

(1) Bastian holds, that they are spontaneously generated from non-living materials as from dead albuminoid substances.

(2) Beale holds, that they are derived from living germinal matter, which he calls bioplasm. That many of the germs which are supposed to be efficient in the spread of zymotic diseases are the result of the degradation of human tissues.

(3) Pasteur holds, that these germs are derived from living organisms of the same kind. That they are everywhere present in the atmosphere. That these germs, falling upon nitrogenous matters, find a suitable pabulum by which they are enabled to develop, grow, and produce countless millions of other germs, to be again disseminated by atmospheric agencies.

(4) No one of these theories is essential to the application of the means by which the products of putrefaction may be rendered innoxious; neither is it necessary to assume that living organisms are the efficient causes in producing zymotic diseases.

(5) Much less is it necessary to assume that the virus of the snake or of the dissecting knife is due rather to some minute microscopic organism, than to an active ferment which acts upon the blood corpuscles.

24. It is enough to grant that in very many cases of putrefaction and fermentation they are present. Either because (1) they are essential agents in producing decay, or because (2) they find in decaying matters a suitable nidus and a pabulum which contributes to their growth and propagation.

We may believe that many diseases are attributable (1) either to decaying organic matter which evolve dead ferments and poisonous gases, or (2) to the living germs which are frequently found and frequently supposed to be among the products of decay.

25. If the decay can be controlled or prevented, the living organisms will not appear, either because (1) the germs are unable to find the nidus and pabulum essential to their development, or (2) because the agents which prevent decay also kill the germs, or at least render them inert.

HOW TO PREVENT OR CONTROL THE NOXIOUS PRODUCTS OF DECAY.

26. The means employed may be arranged in five groups: (1) Preventive measures. (2) Antiseptics. (3) Disinfectants. (4) Deodorizers. (5) Smell disguisers.

27. To determine the relative expediency of either, it is first necessary to form a clear idea of the result to be accomplished.

(1) The space infected by noxious exhalations, whether of poisonous gases or of microscopic germs, may be an entire district, a large city, or a single habitation.

Certain districts have been notoriously unhealthy from time immemorial, as the Campagna of Rome, where no drainage has been sufficiently thorough; and the Delta of the Ganges, whose slow current, impeded by tides, permits bodies of animals and the filth of the neighboring towns to rot and fester almost undisturbed. Other districts, formerly regarded as miasmatic, have lost that character from the drying up of swamps or from a more thorough system of drainage.

So, also, cities have gained much in opening broader thoroughfares for the ingress of pure air, which sometimes sweeps contaminations away like a charm; in providing extensive systems of sewerage; in the increased efficiency of sanatory regulations, aided by a plentiful supply of pure water. In other respects the work of the city is the united efforts of all householders, and, therefore, what applies to one good citizen applies to all, whether good or bad.

(2) There is a distinction to be drawn between dirt and filth. Dirt is matter in the wrong place. Filth is matter which either is or may become hurtful. Mere dirt, like a heap of ashes or sand, may become inconvenient or unlovely. Filth is horrible, nauseating, infectious, deadly.

(3) Any dead matter which is putrefying or is liable to become putrid, is to be viewed as filth either *in esse* or *in posse*. This includes the ordinary garbage of the house, the contents of vaults, sewers and drains, matter in the uncanny and neglected corners of cellars, etc.

(4) It must also be remembered that, at certain seasons, putrefaction takes place more rapidly than at others. The summer finds an accumulation of matters whose decay has been prevented by the cold of winter. On occasions of some epidemics, matters, ordinarily comparatively inert, are subject to atmospheric influences of a strikingly energetic character. On such occasions fresh excretæ may be at times considered already to have passed into the putrefactive stage.

(5) While it is a disputed fact whether the air or water is more efficient in transporting contagious or infectious matters, it may safely be assumed that too great care can not be taken in providing an abundant supply of pure water, in securing cleanliness, and in maintaining an efficient system of ventilation.

28. *Preventive measures.* It is an obvious truism to say that the first requisite for putrefaction is a putrescible substance. Filth and garbage should never be allowed to accumulate. Neither nidus nor pabulum should be afforded for possible bacteria or fungi.

So, also, the conditions necessary for decay must be present, and if they are removed, the process ceases. Hence, on the large scale, as in preparing fertilizers, drying is found to be the only requisite necessary for preventing the loss of the fertilizing material not already decomposed.

So, also, much of the ordinary garbage of the kitchen can be put out of harm's way simply by burning each day's accumulations in the kitchen stove. This avoids at once the stench of sour swill and the gradual accumulations of sluggish drains.

So, on a large scale, if cities would furnish an effective system of drainage and enforce its use; if they would make the cleansing of streets thorough and at short intervals, prevention might be carried so far as to insure immunity to all ordinary chances of cholera and the like class of diseases.

29. *Antiseptics* are those substances which prevent putrefaction or fermentation. Their action is, in some cases, doubtful, but they may be grouped as follows:

(1) They decompose organic matters before natural decay sets in, frequently acting corrosively. Such are the strong mineral acids, the alkalies, and quick-lime.

(2) They abstract water from the substance. Such are sugar (in preserving vegetables); salt (NaCl) and sodium acetate (in preserving meats); calcium chloride.

(3) They form more stable compounds, or at least coagulate the albumin. Such are tannin (in making leather); creasote (in smoked meats); alcohol (in preserving cabinet specimens); phenol or carbolic acid; many mineral salts, as mercuric chloride, zinc chloride (Burnett's fluid), ferric chloride, cupric salts, acetates of ammonium, barium and lead, potassium bichromate, aniline nitrate, cresylic acid.

4. They exclude the air. Such are glycerine, the fats and oils (in sardines, Strasbourg pates), paraffin, wax, etc.

30. *Disinfectants* are those substances which arrest putrefaction or fermentation already begun. Many substances already named as antiseptics may also be included in this class.

(1) They decompose the ferment and form harmless compounds.

Such are chlorine, bromine and iodine, and any substance which is capable of yielding them in the free state, *e. g*, the hypochlorites of the alkalies, viz: the so-called chlorides of lime (or bleaching powder), of soda, and of potash (Labarraque's fluid, Javelle water).

These compounds are not to be confounded with chlor-alum, bromo-chlor-alum, etc. These, in decomposing, yield hydrochloric acid, possibly, in the last named, a little bromine.

To prepare chlorine, mix NaCl ℥iss, MnO_2 ℥j, H_2SO_4 ℥ij, H_2O ℥iij, and heat gently.

Chlorine acts (1) by reason of its strong affinity for hydrogen, which it removes from the organic compound; (2) by substitution, entering the compound by taking the place of one or more hydrogen atoms; (3) in liberating oxygen, as when it decomposes water, as thus acts indirectly as an oxidizing agent.

Such also are oxygen, ozone, and any substance capable of acting as an oxidizing agent; as pernitric oxide N_2O_4, the fumes of nitric acid; sodium manganate Na_2MnO_4 (Condy's green fluid), potassium permanganate $KMnO_4$ (Condy's red fluid).

Both chlorine and oxygen also decompose many of the offensive products of decay, as H_2S, H_3P, H_3N, hence they are efficient in removing foul odors.

(2) They absorb oxygen from the ferment and from the surrounding air. Such are sulphurous acid SO_2, the alkaline sulphites, the ferrous salts (as green vitriol).

(3) They probably kill the living organisms and their germs. Strychnine kills infusoria; formic acid kills mycoderms; arsenious acid. The action of spices and the essential oils is probably analogous. The germ-killing properties of carbolic acid have been much debated.

31. *Deodorizers.* These bodies neither prevent nor arrest putrefaction. They are, however, capable of absorbing and retaining enormous quantities of the gaseous products of decomposition. Such are all the forms of charcoal and other porous bodies, as platinized charcoal.

These bodies also frequently act as purveyors of oxygen: the oxygen within the pores of charcoal is capable of decomposing hydrogen sulphide, etc.

Such also are dry loamy earth and peat. These bodies, when used in the so-called earth closets, etc., act as antiseptics by removing the water from the fæces and excluding the air.

The platinized charcoal is very efficient when worn as a respirator.

32. *Smell disguisers* are those bodies which overpower one odor by another. They intensify the evil which they are intended to palliate. Such are burning brown paper, pastilles, and various aromatic perfumes.

Such also, to a great degree, it is to be feared, are some of the mixtures which are sold as disinfectants. Some of these are known to be inert matters, mixed with a small quantity of the dead oil of tar. This dead oil may smell very strongly when it contains but a trace of carbolic acid, which is thought to cause the odor.

33. The choice of any of these substances will vary with the locality and purpose for which it is to be used. The New York Board of Health use:

1. For streets and gutters, freshly slacked quick-lime.
2. For fumigation of unoccupied houses: in cases of small-pox, burning sulphur; in cases of typhus, chlorine gas.
3. For disinfecting occupied rooms: in cases of small-pox, the fumes of carbolic acid, and a solution of 90 parts of ferric chloride of specific gravity 1.3, mixed, when wanted for use, with 10 parts of carbolic acid; in cases of typhus, chloride of lime and abundant ventilation.
4. For disinfecting clothing, 8 oz. zinc sulphate and 1 oz. of carbolic acid in three gallons of water.
5. For disinfecting privies, the mixture of ferric chloride and carbolic acid.

These agents are cheap and effective.

34. "An ounce of prevention is worth a pound of cure."

Art. II.—Prolapsus Uteri—A Case.

By J. M. CURRIER, M. D., McIndoe's Falls, Vt.

I noticed, in the January (1873) number of the Cincinnati LANCET AND OBSERVER, the report of a case of prolapsion of the gravid uterus, by Dr. Hazzard, of Springfied, O. This brought to my recollection a case of a similar character that occurred in my own practice a short time since. The woman was strong and well nourished, three months advanced in pregnancy, and was taken in labor pains only a few hours before my seeing her. Her pelvis was very roomy, uterine contractions strong, and she was making strong efforts to assist labor by straining as women usually do; also pulling at the bed-post, pushing with her feet, with one woman pressing on her back, and another on the abdomen. These efforts had pushed the uterus and contents low down into the pelvis, so that, as labor went on, and the fetus being about to pass the os, the whole mass was still more thrown forward and the neck projected from the vulva. In this condition the fetus, with the secundines, dropped into the world without coming in contact with the vagina or external parts of the mother. A thought occurred to me that I should be obliged to put the uterus back into place, and that I might have some trouble in retaining it there, but on examination I found that it had gone back, high up in the pelvis, where I could scarcely reach it with the finger. No untoward symptom followed.

It is quite customary for women to strain very early in subsequent labors, from *habit*. They, having received much benefit from it in the latter stages of the first labor, feel inclined to strain when labor pains came on in subsequent labors; hence when the pelvis is roomy, and pregnancy advanced only a few months, prolapsion is easily accomplished. During labor it is my custom to instruct the woman to make no efforts on her part, in the early stages, as it is only an inclination of habit and will only waste her strength. In this early straining I have known the membranes to be ruptured, and the os dilated by means of the child's head, and thus labor made tedious and delayed. In the case that I have related, the uterine contractions were sufficient to have expelled the fetus; no straining was necessary—it only expelled the uterus.

Art. III.—Longview Asylum.

By GEO. HOLDT, M. D., Cincinnati, Ohio.

A year ago, Mr. Editor, you kindly opened the columns of your estimable journal to some remarks on the twelfth annual report of the Longview Asylum. I confess that then I thought the superintendent's report could not but be a medical one; and, if it failed in many respects to satisfy professional men's expectations, I was prone to excuse Dr. Webb on account of his having entered upon duty but a few months previous. No such excuse can be pleaded now, when we have to appreciate the thirteenth report. In fact, Mr. Editor, its author seems to have resigned himself to simply comply with the law, requiring him to present to the board of directors a report of the institution's "affairs"—and nothing but affairs. In his politeness toward the directors, and in his endeavors to spare them the trouble of reading scientific matter, he entirely disregards his medical brethren's wants and wishes. The report being written for the directors only, it is scarcely fair to criticise it from a medical point of view, and if we do it notwithstanding, it is on account of some details in the steward's part, in the tables, and for rejoicing at one, at least, of Dr. Webb's suggestions.

Table No. 2, page 6, is positively intended to give weight to the suggestion of adding a special pathologist to the medical staff of Longview. As a stratagem, we most heartily approve of table No. 2. It informs us that seventeen cases of death are due to "chronic maniacal exhaustion," three to "acute maniacal exhaustion," and two to "maniacal exhaustion and erysipelas of the head." This, certainly, is not the language of a pathologist. But what mean those mysterious two cases of "pernicious internal fever?" The necessity of a pathologist is clearly demonstrated, and urgent.

Dr. Webb largely expatiates on the improvements and repairs. They are essential things, of course; but could they not have been reported by the steward just as well, thereby leaving the professional man to communicate some interesting cases—some observations and experiments to his fellow-physicians? Then all of us would have rejoiced still more than we do now, of course, upon learning that Dr. Webb sleeps more quietly since the erection of the carpenter-shop and lumber-room at some distance from the main building. It is satisfactory to read that the patients have been employed in outdoor work as much as possible; but it is most regrettable to be informed that, "with few exceptions, there is but one employe in each department who has a general supervision over those engaged therein." In the preceding report the number of nurses was stated, and you could approximately say how many patients were under the care and supervision of one attendant. No such statement this time; and if you understand it to read between the lines, the passage quoted means—Sometimes the patients are left unavoidably alone, without any supervision at all. We suppose that Longview has a couple of wards, containing those unhappy patients who have gone down so deep as to neglect the calls of nature—we mean the wards of the unclean. It would be interesting to learn how many of these patients fall to the charge of one nurse.

Under the head of "amusements," Dr. Webb says: "We have endeavored to surround the patient with objects pleasing to the eye, with sounds that would delight the ear, and with words of cheer to make this their home." There is almost *the same sentence, verbally*, in last year's report; we criticised it then. What means the text of pages 10 to 13? For whom is the threadworn and uncalled for tirade on restraint intended? And the dissertation on inebriates? Certainly not for physicians, but for the directors exclusively. It may be new to most of them, and so well adapted to their understanding of the points at stake that it can not but meet their full approbation, recommendation, and praise. A sickly sentimentality, combined with some astuteness in handling the foibles of influential classes, you know, is very successful sometimes. We fully agree with Dr. Webb in believing that the abuse of liquors is one of the most prolific causes of mental disturbance. But we are sorry not to be able to acknowledge Dr. Webb's priority of this discovery, which commonplace truism therefore scarcely deserved being printed in italics. Dr. Webb, Mr. Editor, I am sorry to believe, does not read your journal; but if he did, I would suggest that he treat, in his next report, the influence of our public as well as domestic system of education in regard to insanity. Has it never come to the superintendent's mind that education might have something to do with insanity not only, but with abusive drinking too? Since the doctor gives the preference to philosophical and moral investigations over pathological ones, the subject might be rendered instructive and interesting at once to the board of directors and to the public at large. There are twenty different tables, supposed to be statistical ones, affixed to Dr. Webb's thirteenth report, while the precedent one, fortunately, had but nine. It is not possible to say what the use of these tables is, except they be intended to increase the bulk of the brochure, which otherwise might appear too thin, even to the directors. Please look at table No. 7, page 16, showing supposed causes of insanity in patients admitted during the year. The supposed causes are very nicely arranged alphabetically, and read as follows: "Business anxiety, three; congenital, two; coup de soliel, (sun-stroke) three; disappointed affections, two; disease of brain, one (!); —— fever (?), one; jealousy, two; hereditary, eight; unknown, eighty-nine." Now, out of 246 cases during the year, there is but one single one of disease of the brain! Is not that marvelous? Moral agents and pathological conditions (business anxiety, disappointed affections, disease of the brain and spine and kidneys), are put together indiscriminately. Could not the doctor have looked into some good manual? He might have found the possibility then to add one more table to his valuable publication, under the heads of "moral causes" and "physical causes;" but then it is true that one case of disease of the brain would have been too shocking. Table No. 8, "showing form of insanity admitted during year." According to this, epileps y is a form of insanity, and so, too, dipsomania. In table No. 10, showing nativity of patients, etc., Dr. W. refuses to acknowledge that Prussia is a German state—there are seventy-four patients from Germany, and one only from Prussia. We may charitably pass the rest of the tables, Mr. Editor—they are just as judicious as they were in last year's report. We recommend to attentive readers table No. 16, "showing occupation of 2,814 patients," and table No. 20, "showing supposed cause of insanity in 2,814 patients," both of them are worth being sent to the Vienna exhibition.

The steward's report, Mr. Editor, being by far more interesting than Dr. Webb's, claims some attention, and kind readers, we hope, will excuse us for introducing some figures:

Daily average number of patients under treatment in 1871, 556; in 1872, 585.

Cash disbursements during the year 1871, $140,391.43; in 1872, $103,487.52.

Although the average number of patients during the last year surpasses by twenty-nine that of 1871, the expenses show that $36,903.91 have been economized. Now, the question is, how has this result been obtained, so praiseworthy and so satisfactory to the tax-payers? We must look into the detailed statement of expenditures for an answer (fractions of a dollar are omitted):

	1871.	1872.	*Difference.*
Coal	$8,213	$5,886	$2,327
Butter and eggs	5,494	3,879	1,615
Dry goods	8,699	3,893	4,806

	1871.	1872.	*Difference.*
Flour	$4,716	$8,774	.....
Groceries	15,436	10,892	$4,544
House furnishing	1,029	2,804	1,775
Ice	454	44	410
Meats, fish, and poultry	15,156	9,290	5,866
Produce and vegetables	5,418	2,353	3,068
Wine, beer, and liquors	1,300	429	871
Boots and shoes	1,608	920	688
Amusements	389	584	......
Medicines and surgical instruments	3,111	920	2,191
Officers' salaries	5,845	7,102	1,257

"Now, Mr. Editor, how will a candid and unsophisticated reader conclude from the detailed statements just quoted? Upon an average, there were twenty-nine more patients in 1872 than in 1871, and nevertheless all the items embracing the most essential articles of human maintenance and comfort fall far from the corresponding ones of 1872. Of the two things, one only is possible. Either, in 1871, there has been a wanton lavish of coal, butter, eggs, dry-goods, groceries, ice, meats, fish, poultry, produce and vegetables, wine, beer, and liquors, boots and shoes, etc., or there has been, in 1872, a still more wanton economy in the very same articles. Which of the two does Dr. Webb wish us to believe? For our part, we would prefer to be suspected of having been too generous in providing the patients with animal food, clothing, wine and beer, boots and shoes, rather than to make anybody believe that, in order to obtain the directors' recommendations, the patients have been fed and dressed and warmed in a miserly way. Some months ago there was a rumor, even in one of our daily papers, that the administration of Longview had become so economical in regard to coal that the patients and attendants were left shivering from cold, while the windows were not even opened for the sake of ventilation. We did not believe it then, nor do we now; but if it were true, it would explain how $2,327 could be saved on coal alone. The report states that the bodily health (speaking popularly) of the insane at Longview has been better in 1872 than 1871, and this is proved by the expenditure for medicines, which is less than the year previous by above $2,000. Therefrom we would infer that the asylum's patients' appetite, upon the whole, has been better than in 1871. This conclusion admitted to be correct, how does it happen that the expenses for food are so much less in every item, except in one? If you look at the detailed statement of expenditures, you will find that almost double as much flour has been consumed in 1872 as in 1871. This, we think, sufficiently explains the economy made on all the other articles of provision. Last summer was excessively warm. How then could Dr. Webb succeed in economizing on ice? In 1871, $454.58 were paid for ice; in 1872 only $44.66, a difference of $409.92. Please look, for a partial explanation of this remarkable fact, at page 34 of the report, under the head of "meats and fish." You will find that $1,484.58 were paid for salt meats, an article not once mentioned in the previous report. Salt meats, certainly, do not require ice for their preservation. Besides flour, Mr. Editor, there are but two items showing an increase over the previous year's expenses: 1. Amusements. This is accounted for by the purchase of an organ (which, undoubtedly, should have been charged to furniture) and by the frequent administration of music, considered by Dr. Webb to be a powerful therapeutical remedy in the treatment of the insane. 2. There is the item, "officers' salaries;" it shows an increase of only $1,257. Far be it from us to deny, that the officers of Longview have largely deserved of an increase of salary. But it does not look well to find this one item higher than in last year's report, while all the rest (except flour and amusements) is considerably lower.

If you were to ask, Mr. Editor, what reasons have caused me to once more undertake the penible task of reviewing Longview's annual report, I would have to quote Dr. Webb's own words. Page 13, when speaking of official visitors, Dr. Webb says:

"A more thorough knowledge of the inner workings of an insane asylum, among the influential citizens, would tend to assist in a great measure the efforts of the officers and trustees of such institutions."

That 's exactly our own view, and we have no other aim but to turn the influential citizens' attention to some obscure points in the report, for fear they might escape them. The superintendent is in favor of frequent inspections of our public institutions, and that the investigations thereof should be thorough, "and not simply a walk through the wards." Dr. Webb is perfectly right, but why not say in what manner and by whom the frequent inspections of a lunatic asylum should be conducted? What the grand jury has to inspect at Longview, we are incapable to understand. Who are those who ought to take an interest in the welfare of the insane? Are physicians among the number? Does the doctor know how and by whom such inspections are carried on in England? Why not inform the influential citizens, and prevail upon them to bring about the adoption of an analogous plan of inspection? We feel perfectly confident that then the reports of Longview would become still more worth printing and reading than they are now.

Carbazotate of Ammonia to Supersede Sulphate of Quinine (Ib.)—In a recent communication to the Societe Therapeutique de Paris, Dr. Dujardin-Beaumetz investigated the character, properties, and uses of carbazotate of ammonia (combination of ammonia with carbazotic, picric, or trinitrophenic acid), especially as a therapeutic successor to sulphate of quinine. After relating the successful employment of this salt in intermittent fever by Braconnot, Calvert, Aspland, Bell, Chazereau des Thureaux, Manopa, etc., Dr. Beaumetz gave the results of six cases treated by himself, and of various experiments carried on upon animals and man. Like quinine, carbazotate of ammonia diminishes the strength of the pulse, and brings on heaviness, cephalalgia, and even delirium, and is eliminated by the kidneys. These effects have again been stated by Dr. Beaumetz. As to the clinical results they may be summed up thus: Case 1. Quotidian ague; recovery after four days' treatment; daily dose from one to two centigrammes of the substance in pills. Case 2. Quotidian ague (sulphate of quinine having been given without effect); complete recovery after five days; five pills used. Case 3. Tertian ague; recovery after eight days; two pills a day. Case 4. Quotidian ague; recovery after eight days. Case 5. Facial neuralgia; speedy recovery. Case 6. Tertian ague—sulphate of quinine had been administered during seventeen days with no resul—tcompletely cured after the administration of six centigrammes (about one grain) of the salt for two days.

Translations.

Ovarian Cysts—Fibrous and Fibro-cystic Tumors of the Uterus —Gastrotomy—Extirpation of the Uterus and the Ovaries.

Complete statistics of the successful and unsuccessful cures of Dr. PEAN. Translated from *La Tribune Medicale*, November 26, 1872.

Now that the question of gastrotomy is going to be the subject of the academy, M. Pean considers it as a duty to submit to the judgment of the learned body the results of his experience within the last two years. In fact, important modifications having been effected in the manual execution of this operation, the results obtained, more and more encouraging within these late periods, allow no longer the reserve which one may have displayed at another period. In regard to such a subject, the affirmations, from whatever source they came, must yield to facts indisputably established. Now no one doubts that gastrotomy applied for the removal of ovarian cysts, gives valuable results.

For simple cysts, non-adherent, one may even say cure is the rule. For adherent cysts, for those with their walls with unfavorable contents, whether this be blood, viscous or purulent, the proportion is less; one may still fix it at sixty or seventy in a hundred operated upon. Here is, besides, the table of results obtained by the surgeon of Saint Antoine, in the year 1871–2. Thirty-three patients have undergone the operation for ovarian cysts. Now out of this number twenty-six are cured and are still living, except one of them who died long afterward from epidemic dysentery.

Of the seven who have succumbed to the operation, one, æt. 23, was cured for three weeks, when she became equally a victim to grave dysentery which prevailed during the last year; another, æt. 68, could also be considered as cured, died suddenly of senile exhaustion at a moment when she appeared beyond danger.

As to the five others, the one aged 62, died some days after the operation from shock and anemic exhaustion; two died from purulence caused by suppuration of the cyst and a peritonitis, anterior to the operation; the last one finally yielded to anemia, produced by punctures made into a cyst with hemorrhagic tendency. With twenty-eight patients, the removal of the cyst, notwithstanding the number and gravity of the adhesions, has been total; with five others it was partial—that is to say, that a part, or almost the whole of the cyst was left to suppurate. Of these five cures four have recovered; the fifth sank from imperfect reaction produced by anterior anemia. The importance of care bestowed upon patients after the operation, will be easily understood when one shall remember that in an aggregate of thirty-three patients who have been subjected to ovariotomy in the same house during the last three years, M. Pean has had the satisfaction to see twenty-eight cured. Out of these thirty-three patients, twenty-five had their cysts maintained by very grave vascular adhesions; many of them were reduced by anemia and former tappings, which, without doubt, explains the great delay that some confreres made before having their patients operated upon. Doubtless if, as in England, these latter had been operated upon earlier, the mortality following ovariotomy would be almost null. M. Pean then passed in review the different modes which he employed in these operations. For simple cysts: Incision of the walls, puncture or incision of the cells, traction of the cyst to the outside ligation of the pedicle, closure of the wound.

In complicated cysts, the processes having to be put in comparison with the difficulties that may present themselves, one can in a manner generally class them in three groups:

First. In cysts the least complicated: The method which has just been indicated may be followed. After having previously detached the adhesions or excised them, be careful to include them in the two ligatures. In all cases the surgeon should be amply provided in view of possible hemorrhage.

Second. Although adhesions may exist to an extent more or less considerable, between the cyst and the very delicate organs, the corresponding portion of the tumor is thus preserved and so disposed that its products can not be poured outside. All the rest of the tumor is removed.

Third. In other cases there exist general adhesions so extensive and vascular that it becomes dangerous to excise them. In this case, evacuation of the liquid accumulation, destruction of the cell walls, reduces to a single cell. The entire wall is preserved, and the cyst so disposed that all the new liquid secretion may escape outside. One should carefully avoid all effusion into the interior, however small it may be.

Besides, adds M. Pean, it is not possible to lay down fixed rules in this respect—they should vary according to the case.

The St. Antoine surgeon, for example, insists upon an operation which we are going to make known, and where he employs what he calls a mixed method. He does not enlarge upon that which has been presented of interest in each ovarian operation which he has practiced. Nevertheless, he mentions with more care than he had done, up to this time, a variety of cysts which he names hemorrhagic, in opposition to purely serous cysts, simply sanguinalent or purulent. He states that the increase of these is rapid; that it takes place by abrupt and successive prominences; and that each corresponds to the hemorrhagic appearance furnished by the vessels contained within the cells of the tumor. Each of these hemorrhages gives rise to immediate symptoms, painful, and so alarming that the life of the patient appears in danger. The punctures themselves predispose to the reproduction of these hemorrhages in a manner that causes not only an escape of blood more or less altered and viscid, but even an escape of pure blood, as if the trocar had been thrust into the cavity of a vessel. Besides the symptoms proper to internal hemorrhages, these manifestations are still accompanied by those that are particular to circumscribed peritonitis; so this blood by its contact, and by the alteration which it undergoes, appears to exercise an unfortunate influence.

It is in these cases that one sees œdema of the inferior extremities rapidly take place, infiltration of the abdominal walls, incessant vomitings, acidity of the tongue, and wasting of the forces; and that the patients lose power to move. M. Pean thinks that the diagnosis of cysts of this species being once made out, one should abstain from any puncture that may be dangerous, and to operate as early as possible being the only means of salvation. The most favorable chances of cure will be when the tumor has not existed too long, when the adhesions may be the least possibly spread, and that in detaching them one does not meet with blood too aplastic.

M. Pean then related a case in which he applied what he denominated a mixed method. Here is the *resume* of this operation and of the various steps which he had to employ successively.

A woman, æt. 51, a midwife, came to M. Pean with an enormous abdominal tumor, having had to undergo twelve tappings in two years, the few last being renewed every fifteen days, each tapping giving from fifteen to twenty-six litres of a thick viscid liquid, a multilocular cyst being found, the largest loculies of which had a capacity of fifteen *litres*, while a large number of much smaller loculi were scattered at the base of the abdomen and in the cavity of the pelvis.

General adhesions in front and all around ligation and compression; then *morcellement* of the principal tumor. To do it he had to compress not less than sixty-one vessels, from the size of a crow's quill to that of the little finger. This done, the threads and hemortatic forceps being gathered together into a bundle, search was made for the pedicle. The latter was wanting. The enormous tumor was implanted directly upon a surface longer than the two hands, extending from the right half of the uterus even to the right iliac fossa and to the bottom of the pelvis. In presence of this unexpected fact, the usual method was abandoned, and M. Péan had recourse to cauterization by the iron to all the *implanted* surface. While performing the act of cauterization a very strong jet of blood escaped; the fingers were quickly applied to arrest it. At the same time, numerous clots of blood detached themselves in the neighborhood. He was once more obliged to vary the method; metallic ligatures by the aid of the *serre nœud* of Dr. Cintrait to the *whole* surface, compressed the vessels anteriorly, divided and cauterized; those more distant were tied with thread, besides six forceps were permanently left, afterward being brought back with the two ends of the metallic wire toward the inferior angle of the wound; this was finally closed—cured. The patient was presented to the academy. The subject of ovariotomy and ovarian cysts being dismissed, M. Péan came next to hysterotomy and the removal of uterine and peri-uterine fibrous tumors and to fibro-cystic tumors of the uterus. Now, the reserve that certain surgeons recommend is much more rigid; is it more advantageous? asked M. Péan. As to himself, first of all, here are the results, which he has obtained, of operations performed upon the patients since September 4, 1869, up to the present. Eight patients have been operated upon for fibrous tumors of the uterus, and three for fibro-cystic. Of the eight operated upon for fibrous tumors, of which one was peri-uterine, five are cured, three have perished.

One from retro-uterine hematocele which originated from an erroneously preserved ovary, two from anemia and want of reaction. Of the three operated upon for fibro-cystic tumors, two are cured. In one of these, the tumor was of utero-cystic form; in the other, evidently fibro-cystic. The other sank under the shock, and anemia. Here are the seven cases upon whom we have practiced amputation of the uterus and both ovaries, said M. Péan, which we have the honor to present to-day to the academy, and it is easy for one to satisfy himself that each enjoys the most flourishing health. With these operated upon M. Péan presented the most voluminous fibrous tumors which he had removed from the abdomen of these patients. He continued as follows: *First.* Fibrous tumors with regard to the diagnosis; the difficulty consisted in being able to determine, if the tumor is really fibrous, and afterward if it is such peritoneal interstitial or intro-uterine. In two of his patients M. Péan was able to verify the opinion of Dupuytren, that certain fibrous tumors may assume the aspect in course of time of fibro-plastic or cancerous tumors. Two good signs in the latter cases are furnished by the very prompt production of acites and by the fetid ichorous blood which escapes at each menstrual epoch. A patient, operated upon by M. Péan this year, offered good examples of this mode of degeneration.

It is often difficult to define precisely the exact point where the tumor fixes itself. It is, however, possible that one can assure himself how far the tumor descends into the depth of the neck. *Secondly.* Fibro-cystic tumors, often of difficult diagnosis, are susceptible of being confounded with multilocular cysts of the ovaries; exploratic tappings are but too often of no avail—the vaginal touch alone in making known the relation, may enlighten the surgeon. Is the tumor movable or adherent? What is the extent of the adhesions?

These are the most special points to determine, and which are far from being free from embarrassment. It is principally in fibrous and fibro-cystic tumors, that require the entire or partial ablations of the uterus, that M. Péan has recourse to his process of *morcellement.* The abdomen being opened, the adhesions detached upon the anterior face, the tumor is attacked by breaking, aided by the wire, with the trocar, with the *serre nœuds;* the operator stops at the moment when the tumor is far enough reduced in volume to be able to be withdrawn to the outside without provoking disorders in its passage, after a ligature has been passed beforehand under the mass to be extracted. The morbid part being excised, the tissues around which the ligature passed are drawn toward the inferior angle of the wound and retained at this level. At the same time that the body of the uterus is removed, it is a rule with M. Pean to remove both ovaries. The motive for this step, for the same reason, however, that causes him to bring the cut surface into the inferior angle of the wound, is that at each menstrual period a hemorrhage tends to occur at the stump.

In one case, where the surgeon of Saint Antoine had neglected this precaution, at the same time that he left one of the ovaries in the pelvis, he has seen follow a retro-peritoneal hematocele that was fatal. By the means indicated, it is then possible to avoid all like complications. For the manual operation of hysterotomy, for the diagnosis of fibrous and fibro-cystic tumors, and also for a description of different observations representing the results of his practice of late years, M. Pean announced that he had made it the object of a special monograph.*

To recapitulate, and notwithstanding the contrary affirmations very plainly formulated, M. Pèan is far from admitting, especially for the honor of French surgery and of the corps of Parisian surgeons, that in view of principles very healthy to humanity, one should renounce the operation for hysterotomy, in cases of fibrous and fibro-cystic tumors.

In fact, these tumors, by the complications which they determine, render the life of the patient insupportable and threaten it with brief delay. We can not, says M. Pean, conclude this presentation without speaking of other operations not less grave than we have done during the two last years.

Two patients affected with cancer of the ovaries have been operated upon; they yielded to peritonitis due to special adhesions, of which one knows the gravity. Two patients being affected with fibro-plastic cancer limited to the body of the uterus, have equally been operated upon. In the one the operator was contented to practice an incision of exploration, which permitted him to better understand the diagnosis, and which had besides, influenced in no way the progress of the disease. In another, no accident had followed in consequence of the operation, although the patient was for a long time exhausted by vomiting and metrorrhagia, and one believed the cure certain; the twelfth day the patient perished in the space of twelve hours from tetanus.

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*De l'ablation totale ou partiale de l'uterus, par MM. Pean et Urdy. Paris, chez Adrien Delahaye, 1872.

M. Pean will soon publish all these observations. From one of these it will be seen that an exploratory incision, practiced with success, had discovered that a tumor, considered by practical masters as being constituted by an ovarian cyst, was, in reality, formed by an intestinal and peritoneal tumor, immersed in rather a large quantity of acitic fluid. We finally should not, added the eminent surgeon, in concluding, pass under silence a case, rare and almost without example, a fibro-adipose tumor of the mesentery, weighing forty *kilogrammes.* The operation lasted long; but, thanks to the *morcelling process*, it was able to be done without the loss of blood, and without occasioning the wounding of any organ indispensable to life, if she had not suffered with old troubles of all kinds, being more grave, as she was aged sixty years.

Is Insanity on the Increase?—Geo. Fielding Blandford, M. D., of St. George's Hospital, London, in a letter to *The Journal of Psychological Medicine*, July, 1872, speaks of Dr. Maudsley's conclusions on this subject: 1. There is no satisfactory evidence of an increase in the proportion of occurring cases of insanity to the population, and no evidence, therefore, of an increased liability to insanity. 2. It is not necessary to assume such an increase in order to account for the undoubted great increase in the number of registered insane persons. 3. The difference between one insane person in 812 of the population (English) in 1844, and one in 400 in 1870, is mainly, if not entirely, owing to the fact that in the former year the returns included only half the existing insane persons in the country, while in the latter year nearly all of them have been registered. 4. Some part of the difference is owing to the fact that certain patients are registered as lunatics now who would never have been thought so in times past. 5. A lower rate of mortality and a lower percentage of recoveries may account for a part of the increase in the total amount of insanity. 6. The proportion of admissions to the population, which represents approximately the occurring cases of insanity, does not, when the necessary allowances are made, yield evidence of any serious increase.

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE.

JAS. GRAHAM, M. D., PRES'T. J. W. HADLOCK, M. D., SEC'Y.

REPORT OF CASES.—*Dr. Cleveland* presented a specimen and gave the history of a case of *hydro-metra*. The female was a multipara, having borne several children. The speaker said it was stated that these cases occur only in the aged. This case verifies the rule, as the trouble began with the patient about twenty years subsequent to cessation of the menstrual flow. Some ossific deposits were found in the heart.

Remarks were made on the case by Drs. Conner and Reamy.

Dr. Reamy said the dropsical effusion occurs consequent upon inflammation of the internal os. The inflammation could not have been extensive, else the distension could not have taken place. He had seen one case where the uterus assumed the shape of an hour-glass.

Dr. Carson read his report from the section on *Thoracic Diseases*, entitled "Climatology of Phthisis." The report was received, and, on motion of Dr. Bartholow, made the special order for next meeting.

Dr. Reamy said he did not think the fetus a four months' one, since they are more likely to come away enveloped in their membranes, prior to that time, than at or after it. And abortions are also more likely to occur prior to the fourth month, owing to the irritation of the lower segment of the uterus.

The discussion of this case was continued by Drs. Holdt, McMechan, Reamy, Kemper, C. D. Wright, and Carson. During the discussion, the propriety of bringing on premature labor in cases of obstinate and persistent vomiting in pregnancy was adverted to and warmly debated.

Dr. McMechan said he had twice induced premature labor in such cases, a statement, which Dr. Reamy thought, would lead to the inference that Dr. McMechan had in a reckless manner resorted to abortion to relieve vomiting in pregnancy, and that it would have a bad moral effect. Abortion, except in the most extreme cases, should be frowned down; for there was no disguising the fact that it was on the increase, and if it continued to increase, would soon get to be the curse of Protestant civilization. He did not wish to be understood as saying that there were not cases in which nothing else would relieve the patient. The mechanical irritation caused by the presence of the child in utero was, in some cases, so great that nothing but its removal would bring relief to the mother.

Dr. Holdt was emphatic in his opposition to the practice, and could not think of a case wherein he would employ it, except where there was a deformed pelvis. He knew of no German author who advocated its use.

Dr. McMechan replied that in both the cases referred to by himself, there was every symptom of *septalmia*, and coupling that symptom with the feeble condition of his patients, he was led to bring on premature labor.

Dr. Kemper said he conceived a difference between abortion and premature labor; and inquired if it was the habit of members of this society to practice abortion for the relief of vomiting in pregnancy.

Dr. Reamy said he did not think it was done as often as Dr. Kemper would be led to infer from the report of Dr. McMechan's cases. There was no doubt but that in some cases bringing on premature labor should be resorted to; but all other means for the relief of the patient should first be exhausted. The question turns upon the same ground as *craniatomy*—shall the life of the mother or that of the child be sacrificed?

Dr. Carson referred to a case which came under his care while he was yet young in practice. Not wishing to assume the responsibility of bringing on abortion, he consulted with older physicians, who objected to its employment; and the patient finally died of inanimation. Should he meet with such a case again he would not hesitate to bring on labor.

Dr. C. O. Wright referred to a case which occurred in his neighborhood that had been treated by two homœopathists, both graduates of regular schools. The vomiting could not be allayed, nor an abortion produced. Patient finally died from exhaustion. The speaker also mentioned the fact of a child born at the sixth month, which is still living. Weight, 2¼ pounds.

MEETING OF JANUARY 4, 1873.—*Dr. Holdt* reverted to a challenge made at the last meeting regarding the fact that no good German authority recommended the production of abortion for the relief of excessive vomiting in pregnancy. Since that time he had looked up various authorities, but especially Scanzoni and Naegle, although they admit that premature labor might, in rare cases, be resorted to for relief of dangerous vomiting.

Dr. Reamy wished to remind the speaker last up that both cases reported by Dr. McMechan were cases of premature labor, and not abortions.

Dr. Holdt thought the misunderstanding arose from the common application of the terms "premature labor and abortion."

Dr. McMechan said, at the time he reported his cases he neglected to mention an important fact, to wit, that in both instances there were well-marked evidences of the death of the fetus by septicemic poisoning of the mother at the sixth and a half month.

Dr. Graham reported a case of gout, recently seen by him in consultation. Patient suffered from intense pain in the bowels and from occasional expulsive efforts. During several months prior to the attack he had complained of severe pain in the thumb, which disappeared when the internal trouble supervened. The patient passed a normal quantity of urine, but the latter was abundant in urates, which were deposited in the vessel. Since there was no abdominal tenderness, the excessive pain and the surcharge of the urine with urates led the speaker to the conclusion that this was a case of misplaced gout. The patient was freely purged, and then placed upon an alkaline treatment. The urine cleared up, and the patient was soon well. A few days later he was attacked by head symptoms, feeling stupid and dull. This condition gradually became worse, until he was entirely unconscious of things that occurred about him, and died on the third day of this attack. This case recalled to the mind of the speaker a somewhat similar case, in which the patient was attacked with pain, which was out of all proportion to the systemic condition. In this instance the diagnosis was unsatisfactory, until the force of the disease exploded by a regular gouty attack in the foot.

Dr. Carson desired to be informed whether any of the members of the Academy believed in the existence of rheumatic pneumonia, or pneumonia dependent upon specific cause?

Dr. Graham observed that this was a question of great importance, but he himself had never met with a case in which an attack of rheumatism was co-existent with a pneumonia.

Dr. Carson had recently made an autopsy in a case of pleuro-pneumonia, co-existent with which there was a pericarditis. The patient was of rheumatic habit of body, and therefore it is plausible to conjecture that since the pleuro-pneumonia supervened subsequent to the pericarditis, the former resulted by extension of the inflammation from the latter. The speaker thought the most of these cases originated in this way.

RETAINED PLACENTA-POLYPUS.—*Dr. Graham* said that in 1854 he was called to see a woman who had a decided uterine enlargement. The os was slightly patulous, but otherwise healthy. The patient being in general good health, she was advised to submit to no medical treatment. Several weeks ago the patient called upon the speaker on account of previous attacks of metrorrhagia, and on account of the expulsion of a large fleshy mass, which, in all probability, was a polypus, the nutrition of which was cut off by physiological atrophy of the uterus. The patient being at the climacteric, after the removal of the polypus, the uterus retracted to its natural size, after having been enlarged for eighteen years by the polypus.

SYRACUSE (N. Y.) MEDICAL ASSOCIATION.

Abstracts reported by F. H. BUTLER, M. D., Secretary.

CROUP IN THE ADULT.—*Dr. Plant* reported a case of croup in a young lady 24 years of age. He thought the attack produced by laying a cloth on the throat on going to bed, wrung out of cold water, and applied without any protection or covering. The case was severe in character, with a high degree of inflammation, yielding, however, to treatment, and only leaving a sore spot in the trachea. He related the case as peculiar, from being the oldest patient with croup he had ever seen.

Dr. Cook remarked that he had seen a case of true croup in an old lady of 70 years of age.

UTERINE HEMORRHAGE.—*Dr. Fairchild* related a case of abortion at the fifth month, accompanied with hemorrhage, and desired some expression of opinion as to the value of the tampon in the management of such cases.

Dr. Doyle related a case of post-partem hemorrhage, which he attended while a student. Pains were very slow, and scarcely perceptible at first. Upon examination he found the os dilated about one-half, and felt what he thought to be the head of the child, but afterward found it to be the bag of waters, with very firm membranes. He watched the case for three days, then attempted to rupture the membranes with the finger, but ineffectually, on account of their firmness; afterward succeeded with the scissors. The child was then expelled with a single pain. Immediate and copious hemorrhage followed. He applied ice-water over the abdomen, poured freely from a pitcher, and introduced a piece of ice within the uterine cavity; the bleeding was arrested at once, the uterus contracting promptly and firmly.

Dr. McDonald thought the tampon acted as an irritant to the uterus, and not specially as a plug.

Dr. Terry spoke with favor of the practice of introducing ice within the uterine cavity.

Dr. Searl related a case of placenta previa. The patient was taken with hemorrhage several days before labor commenced. He used the tampon several times; also applied astringents—as tannin—about the os. Labor finally came on, and as soon as the os was sufficiently dilated, effected delivery by turning. The case, however, did not recover.

Dr. Van De Warker related a case of severe hemorrhage, the patient being the mother of two children. The flowing had continued for several days. He introduced a male catheter, and injected into the uterus a weak solution of the persulphate of iron, at once arresting the hemorrhage, with no bad effect.

Dr. Felton was partial to the practice of administering ergot just before the termination of labor.

Dr. Bennett concurred. He was in favor of giving ergot in M. xx doses. Sometimes he gave ergot and chloroform in combination.

Dr. Cook reported a case—abortion at the second month. Profuse hemorrhage followed, and when called he soon succeeded in its arrest by the use of ergot, cold, and rest. The hemorrhage, however, returned after about one week, and continued despite all the usual remedies, until the discharge became almost colorless. In accordance with advice of counsel, broth was given freely, with temporary benefit. On examination, a clot was found within the cavity and removed, and a tampon applied, saturated with a solution of sesqui-chloride of iron, with permanent happy result. Iron was used internally as part of the general treatment.

Dr. Terry thought he should use a sponge tent, with perchloride of iron carried into the os uteri, and also suggested the use of one of Barnes' dilators as affording probable relief.

Dr. Bennett gave the case of a lady, apparently in the last extremity from loss of blood. Finding the os dilated, arrested the hemorrhage by injection, through an ordinary catheter of cold water. Bleeding came under control, pains proceeded, and in due time the child was expelled with a good result.

Dr. Mercer said he would use injections with considerable timidity. Had formerly been in the frequent habit of using the tampon, but now seldom resorted to it. Should expect it to be as useful as the injection, and would consider the sponge tent preferable.

Dr. Doyle thought metritis or endometritis might follow the use of iron injections.

Dr. Plant considered that the danger from injections arose from the possible passage of the fluid through the Fallopian tubes into the abdominal cavity, but was of the opinion that it was scarcely possible that a solution of iron could pass the tube.

The Origin of Giant Cells.—Schuppel, of Tubingen, has recently published in the *Archiv der Heilkunde* the results of a series of microscopical researches touching the origin of giant cells, which he had formerly found to exist in tubercle. His recent researches show that the origin of these cells is due to the transformation of vascular contents, or the organization of elementary granules into giant cells. They are, therefore, formed at the expense of the blood plasma, whether they take rise in the vessels themselves or out of them. The process is, therefore, a free formation of cells. *Lancet, Nov.* 30, 1872.

Correspondence.

BOSTON, MASS., *February* 10, 1873.

EDITOR OF LANCET AND OBSERVER: A stated meeting of the committees of the Massachusetts Medical Society was held February 5, 1873. Two or three questions, which had been referred to a select committee, at a previous meeting, were reported on, and gave rise to an animated discussion. One was in regard to the qualifications of membership to our State Society. In enumerating the qualifications necessary for membership, the by-laws say, that the candidate "shall have such an acquaintance with the Latin language as is necessary for a good medical and surgical education; and shall have acquired the principles of geometry and experimental philosophy." In explanation, it would seem, of the above quotation, a "foot-note" is added, as follows: "It is understood that he" (the candidate) "be able to translate the select Orations of Cicero, the Æneid of Virgil, or the medical writings of Celsus, and the formulæ of the pharmacopœia of the United States; and that he have a knowledge of Euclid, Pierce's or Loomis' Elements of Geometry; also of Golding Bird's or Olmstead's Natural Philosophy, or the Cambridge Course of Physics." "If the candidate be a graduate of any college, the examination in these branches may be dispensed with."

It was held that the *text* of the by-laws was stringent enough; and that if the candidate was submitted to an examination in conformity to the above requirements, it would keep out of the society many worthy members of the profession. How this "foot note" came in the by-laws of the society no one could tell. The tenor of the discussion was for the elevation of the standard of medical attainments, but the explanatory note was stricken out by a decisive vote.

Upon the admission of women to membership of the society, the committee presented a majority and minority report. These reports were very freely discussed. Drs. Bowditch, Cabot, Reynolds, and two or three other gentlemen, strongly urged their admission, believing there was nothing in the by-laws to prevent such a consummation. Dr. Bowditch even admitted that he consulted with female doctors. It seemed evident that the effort of the committee, in their majority report, was, in a measure, in behalf of Dr. Susan Dimack, who received her medical degree in Zurich, on the 21st of October, 1871.

Miss Dimack is a lady of culture, thoroughly educated, medically; and, as I understand, in successful practice in this city. She does not look with favor on her sister practitioners who are not up to a high standard of medical attainment. She asks to be admitted to the Massachusetts Medical Society, that she may place herself on an equality, before the public, with its members. She invites the most rigid and critical examination, for her admission; upon that she is willing to rise or fall. Some of the Harvard medical professors are favorable to the admission of females, if properly educated; others are as strongly opposed to the measure.

The minority report finally prevailed, which recommends that legal advice be taken, as to whether women can be admitted to the society, in accordance with the provisions of its charter. So the question rests for a while, only to be renewed with increased zeal by its advocates, if there should not be any legal barrier in the way.

The publisher of *The Journal of the Gynecological Society of Boston* is out with a card, saying that, owing to the continued absence of Dr. H. R. Storer in Europe, and that his contract under which the publication of the *Journal* was undertaken, terminated in the December issue, and that, as he is responsible to the subscribers for the unexpired terms of subscription, he will, as soon as the society come to a conclusion regarding the continuation of the *Journal*, either have their subscriptions continued or return their money.

As Dr. Storer was the life of this journal, his continued ill-health and absence, is evidently the real cause of this announcement of the publisher. I do not think the *Journal* ever paid pecuniarily.

The Fourth Annual Report of the State Board of Health has been presented to the legislature, now in session, and is in the hands of the printer. An abstract of its contents has been published in some of the daily papers, and also in the *Boston Medical and Surgical Journal.* From this abstract, I give you some quotations:

"SMALL-POX.—In our report of last year, this subject, which has since become one of absorbing interest throughout the State, was considered at some length. In view of the epidemic then prevailing in Europe, and also to some extent in Massachusetts, we thought it would be necessary not only to enforce the laws relating to vaccination, but to repeal the fifty-first section of the twenty-sixth chapter of the general statutes, in order that cases of small-pox should be isolated. The absolute repeal was not accomplished, but the law was so far modified as to give local boards of health much greater power for the removal of persons affected with this disease than they before possessed. Had the law remained as it was, we can not doubt that the destruction of life would have been greater than has actually occurred.

"We are now in the midst of an epidemic influence of small-pox poison, more virulent than has been known for many generations. The evidence is abundant to show that both in Europe and America there is, for some reason entirely unknown, a readiness in the human body to receive both the virus of small-pox and the virus of the vaccine disease, such as no one now living has before seen. There are records of such epidemics before the great discovery of Jenner, and they were truly terrible, destroying from one-fifth to one-third of all who were seized; and this comprised the whole population, except those who had been previously attacked, or had been inoculated with small-pox virus. The present epidemic is of such intensity that it is quite common for persons who have had small-pox in former years, now to have it again. Such occurrences have been previously rare. Vaccinations, whether from the cow or from the human body, 'take' readily, and revaccinations prove abundantly the extraordinary susceptibility to the vaccine disease now prevailing and *never before existing*. In view of these facts, with which physicians and intelligent persons of whatever calling are now familiar, let us thank God for Jenner's great discovery, without which our homes would be desolated and our peace and happiness destroyed. The imagination can hardly picture the horror which would to-day pervade Massachusetts were the present epidemic unchecked by vaccination. We regard the law of the State authorizing town boards of health to remove persons affected with small-pox from their homes only *on certain conditions*, as unfortunate in its operation, and think that it would have been better to repeal the fifty-first section, twenty-sixth chapter, general statutes, without reservation, leaving it at the option of the local authorities to enforce the removal to a hospital, or provide for the sick in their homes, as might seem safest and best in each individual case.

"The special report on small-pox, published in the third annual report, recommended that the law concerning vaccination be so modified as to require the primary vaccination of children within six months of birth. Three months would be better. Under present circumstances, a new-born child should be vaccinated without a week's delay. The advice which has thus far been given by our board with reference to small-pox has been as follows: On the 10th of April, 1871, a circular was sent to the authorities of every city and town, warning them of the impending danger from small-pox, and urging the importance of immediate vaccination before the epidemic should get a footing within their boundaries. Inquiries were then made from our medical correspondents all over the State concerning the protection of the people by vaccination. Their replies, with other information on the general subject, were made the basis of a report on small-pox by our secretary, presented to the legislature in January, 1872. The board at that time recommended the repeal of the fifty-first section of the twenty-sixth chapter, general statutes.

"We would again urge upon the boards of health of cities and towns:

"1. To see that every person within their jurisdiction has the protection of recent vaccination.

"2. To use all the powers which are permitted under the general statutes to *isolate* every case of small-pox or varioloid which may occur.

"3. To provide for the destruction of small-pox virus, under medical advice, in all infected clothing and premises.

"Having done these things, their whole duty as regards small-pox, will have been performed.

"SEWERAGE OF THE METROPOLITAN DISTRICT.—The board recommend a survey by engineers in order that a complete and harmonious system may be finally adopted, and refer to the objections made by the city of Boston to the plan recently proposed at the extra session.

"REVISION AND CODIFICATION OF HEALTH LAWS.—It is stated that the interpretation of the meaning of these laws is often difficult by reason of their complexity, and that it would greatly conduce to the efficiency of the local boards, and to the maintenance of public health, if they could be reduced to a form which any intelligent citizen could perfectly comprehend.

"THE LAW CONCERNING SLAUGHTER-HOUSES AND NOXIOUS AND OFFENSIVE TRADES.—Numerous complaints have been received by the board during the past year concerning establishments liable to be closed by the operation of this law. In every case, however, with the exception of one very recently brought to notice, the party complained of, when visited by the secretary, has expressed a willingness to do everything which the board and the complainants thought necessary. Such concessions have satisfied all parties, and the complaints have been withdrawn.

"This disposition is in striking contrast with the experience of the board in 1871, when hearings were necessary in nineteen cases, and many of them were very protracted through the testimony of a great number of witnesses and the elaborate arguments of counsel on both sides. It is very apparent that the readiness of parties, maintaining nuisances of a character which makes them amenable to the State Board of Health, to do all which is needful to protect the health, comfort, and convenience of their neighbors, is the direct result of the orders issued by our board in the summer of 1871.

"BOARDS OF HEALTH OF CITIES AND TOWNS.—The State Board strongly urge upon citizens throughout the State to have the local boards filled with active, competent men, and think that one member of every such board should be a physician.

"BUTCHERS' SLAUGHTERING AND MELTING ASSOCIATION AT BRIGHTON.—This establishment is nearly finished, and will be in operation before the adjournment of the legislature. It is a work of great magnitude. The Board of Health has approved all plans and supervised the construction. Everything is substantial and satisfactory, and the proprietors are highly commended for their enterprise and public spirit. The board calls the attention of the legislature to the fact that no provision has yet been made for the inspection of animals and of meat: 'That such inspection is absolutely necessary to complete the benefits which the public will receive from the abattoir needs no argument. Whoever buys meat from this slaughter-house, must in some way be assured that the animal was in health when killed. The fresh meat will be consumed for the most part within twenty miles of Boston, but the salted meats will be distributed far and wide. We respectfully ask the legislature to provide for the appointment of an inspector of animals and of meat at the abattoir of the Butchers' Slaughtering and Melting Association at Brighton, with an adequate salary to be paid by the State, and that this inspector be under the control of this board, since we are by the law made responsible for the safe and proper management of the establishment.'

"Special investigations have been made during the year of various subjects having a direct influence on the maintenance of public health.

"1. *Sewage and Sewerage—The Pollution of Streams—The Water Supply of Towns.*—This report is in accordance with an order of the legislature and is a voluminous document. It is presented by Prof. William Ripley Nichols and Dr. George Derby, secretary of the board, who are jointly responsible for all statements therein contained. Some of the divisions of this report are under the following headings: Dry earth system; water carriage system; refuse not movable by sewers; meat and vegetable refuse—how disposed of in Massachusetts; sewers now in use in Massachusetts; outlets of sewers; English experience; treatment of sewage by chemical processes; intermittent downward filtration; irrigation; treatment of sewage in Massachusetts; analysis of sewage of Boston and Worcester; effect of sewage on running streams; Blackstone river; Merrimac river; Mill brook; self-purification of rivers; water supply of towns; lakes and great ponds in Massachusetts; lakes supplying metropolitan district; protection of lakes from pollution; plan for utilizing the sewage of Worcester.

"2. *Additional Analysis of Evidence as to the use and abuse of intoxicating Liquors—Beer-shops and Prohibitory Laws.* By the Hon. P. Emory Aldrich.

"3. *On the Character of Substances used for flavoring articles of Food and Drink.* By Henry K. Oliver, M. D.

"4. *Drainage for Health.* By Hon. H. F. French.

"5. *Infant Mortality.* By Edward Jarvis, M. D.

"6. *The Food of the People of Massachusetts.* By George Derby, M. D., Secretary of the Board.

"7. *The Adulteration of Milk.* By Arthur H. Nichols, M. D., assisted by Prof. James F. Babcock.

"8. *Analysis of a Correspondence on some of the causes of Consumption.* By Henry I. Bowditch. M. D., Chairman of the Board.

"9. *Adulterations and Impurities of Food.* By H. B. Hill, Assistant in Chemistry, Harvard University.

"10. *House Accommodations of the Poor in our most populous Cities.* By E. W. Draper, M. D.

"11. *Health of Towns.* This annual statement from correspondents of the board relates chiefly in the present report to the condition of towns of 4,000 inhabitants and upward, as regards sewerage and water supply. Other and various information is, however, included.

"The mortality of Boston in 1872 has been unprecedented. The deaths in 1872 exceeded those of 1871 thirty-seven per cent. Exclusive of small-pox the increase has been twenty-five per cent. The board say: 'Such results seem fully to justify all which has been said in previous reports of our board concerning the culpable neglect of public health by the city authorities of Boston. Public opinion has at last been thoroughly aroused, and has compelled the aldermen to relinquish a large share of the power which they could not wisely exercise, and has placed it in the hands of an independent board from which we have reason to expect the most salutary reforms. In all their efforts to reduce the mortality of Boston they will have the cordial co-operation of our board.'

"It will be seen that *trichina disease* has occurred in Framingham. This is another warning against eating pork which is not *thoroughly cooked.*

"The expenditures for the year have been $3,878.86 of the $5,000 appropriated."

The above extracts give but an outline of the contents of the report.

Heretofore, the Board of Aldermen have constituted the Board of Health of this city, in connection with the Superintendent of Health. Their efforts to stay the small-pox epidemic, for the last four or five months, have been of little account. The *press* and the people clamored for a distinct Board of Health; and the city council finally created such a board. It consists of three members: a physician, a lawyer, and a layman, appointed by the mayor. Since the board went into operation, the number of cases of small-pox have been daily decreasing. Hospital accommodations have been provided, vaccination enforced, and isolation of cases, when not removed to the hospitals. The laws of the State have been recently amended, giving Boards of Health enlarged powers. The following is an abstract of the laws of the commonwealth, relating to health:

"When a householder knows that a person within his family is taken sick of small-pox, or any other disease dangerous to the public health, and shall neglect to give immediate notice thereof to the Board of Health, he shall forfeit a sum not exceeding one hundred dollars.

"When a physician knows that any person whom he is called to visit is infected with small-pox, or any other disease dangerous to the public health, and refuses or neglects to give immediate notice thereof to the Board of Health, he shall forfeit for each offense a sum not less than fifty nor more than one hundred dollars.

"When the board thinks it necessary for the preservation of the lives or health of the inhabitants, to enter any land, building, premises, or vessel within its town, for the purposes of examining into and destroying, removing, or preventing any nuisance, source of filth or cause of sickness, and said board or any agent thereof sent for that purpose shall be refused entry, any member of the board or such agent may make complaint under oath to any justice of any court of record or to two justices of the peace of the county, stating the facts of the case so far as he has knowledge, and said justice or justices may thereupon issue a warrant, directed to the the sheriff or any of his deputies, to such agent of the board, or to any constable of such town, commanding him to take sufficient aid, and at any reasonable time repair to the place where such nuisance, source of filth, or cause of sickness complained of may be, and the same to destroy, remove, or prevent, under the directions of said board.

"The Board of Health shall use all possible care to prevent the spreading of the infection, and to give public notice of infected places to travelers, by displaying red flags at proper distances, and by all other means, which in their judgment shall be most effectual for the common safety. And whoever obstructs the Board of Health in using such means to prevent the spreading of the infection, or willfully removes, obliterates, defaces, or handles the red flags or other signals so displayed, shall forfeit for each offense a sum not less than ten nor more than one hundred dollars.

"Parents and guardians who neglect to cause their children or wards to be vaccinated before they attain the age of two years, and revaccinated after five years from the last vaccination, and all persons over twenty-one years of age, not under guardianship, who neglect to be vaccinated, shall forfeit the sum of five dollars.

"The Board of Health may notify occupants of unfit dwelling-houses, requiring the premises to be properly cleansed, and if they see fit, the occupants to remove therefrom as soon as the Board of Health may prescribe; and any person who occupies or knowingly permits any premises to be occupied, even after having been cleansed, without permission in writing from the Board of Health, shall forfeit a sum not less than ten nor more than fifty dollars.

"For every neglect of the owner or occupant of private property to remove filth or cause of sickness found on his premises within twenty-four hours, or such other time as the board deems reasonable, after notice shall have been served, he shall forfeit the sum of twenty dollars for every day during which he permits such nuisance or cause of sickness to remain after the time prescribed for the removal thereof, and the Board of Health may cause the nuisance or cause of sickness to be removed at the expense of the owner or occupant.

"Whoever violates any regulation made by the Board of Health for the public health and safety, respecting nuisances, sources of filth and causes of sickness, and respecting articles which are capable of containing or conveying infection or contagion, or of creating sickness, brought into or conveyed from the city, shall forfeit a sum not exceeding one hundred dollars." B.

WIESBADEN, GERMANY, *January* 18, 1873.

MY DEAR DOCTOR: It is impossible for me to furnish you any information of a strictly professional character from this point of Europe, partly because there is little of interest transpiring here, and if there was, my knowledge of the language would not enable me to absorb and put it into an interesting shape to impart to others. There is no lack of doctors, however, around this watering place; but as to their quality, I am not a competent judge. So far as I can observe, the specialties of medicine are fully represented, although not advertised in an ostentatious manner. How far their practice corresponds with their modest show of signs, I am not able to determine. I see the term "Hofrath" attached to the name of some of them, and this may mean, "head doctor," "skilled doctor," "big bugs' doctor," or something more pretensive.

We have a great medicinal fountain here, however, of some celebrity and of ancient date, which has many admirers, and is not wanting in extravagant laudations by the people of this town. In fact, its existence has given a local habitation and a name to Wiesbaden, which is one of the most celebrated watering places of Germany. Its pretensions are founded upon the existence of a hot spring, or rather, springs, the reputation of which is handed down from a remote period. Pliny, and also other historians, mention them. They were known to the Romans, and held in high esteem by them, and from their well-known partiality for hot baths on account of their medicinal value, it is not singular that they had an extended popularity. They are spoken of under the name of "*Fontium Aquarium Mattiacarum*," which means the fountains, or baths of the meadows. The remains of ancient buildings, the so-called Heidenmaner (or Heathen's Wall), of fortresses, Roman baths, etc., prove the truth of the historians.

Roman Wiesbaden would also seem from the discovered relics to have been situated in the neighborhood of the Kochbrunner, or boiling springs, which were probably used even before the time of Julius Cæsar. The main spring has the appearance of active ebullition, from heat bubbling up several inches in height, and the foggy vapor rising from it, particularly in cold weather, adds to the impression. The force which produces the appearance of boiling, however, is mostly owing to the large amount of carbonic acid gas contained in the water, as will be seen by the analysis. The temparature is 156° Fahrenheit, which, of course, is below the boiling point. In this respect it differs from the Geysers of California, which boil and emit steam from them on account of the temperature of the water being above the boiling point. This is said to have been the favorite residence of Drusus, and that the Emperor Tiberius erected baths here. Much more might be said in reference to the history of this region, but enough for the present. The poetical turn of the Germans has also had its day in perpetuating the history of this locality. The following is the analysis of the water of the spring as made by Frasenius, who, you are aware, has his well-known laboratory and lecture-room here: One pound of sodium (7,680 grains) contains: Chloride of sodium, 52.5 grains; chloride of potassium, 1.1; chloride of lithium, 0.00138; chloride of ammonium, 9.1; chloride of lime, 3.6; chloride of magnesium, 1.5; bromide of magnesium, 0.02760; iodide of magnesium, traces; sulph. of lime, 0.7; phosphate of lime, 0.00299; arseniate of lime, 0.00115; carbonate of baryta, traces; carbonate of strontia, traces; carbonate of lime, 3.2; carbonate of magnesia, 0.07979; carbonate of protoxide of iron, 0.04339; carbonate of manganese, 0.00453; silica, 0.46018; silicate of alumina, 0.00392; organic matter, traces. Gases: Carbonic acid, 6.146 cubic inches; nitrogen, 0103.

As you will observe by this analysis the chloride of sodium is the largest element of the solid constituents. Others, however, exist in sufficient quantities to modify the medicinal qualities of the water, particularly when taken freely.

This is a pleasant town for a residence, whether for invalids or persons in health. It has a pleasant, cheerful, new appearance, and is growing rapidly. The streets are profusely embellished with beautiful shade-trees of various kinds; parks, with artificial lakes and fountains; walks, gardens, and flowers adorn the town in every direction; beautiful drives extend to neighboring farms, villages, forests, mountains, and rivers, all of which contribute to the pleasure of the sojourner, whether seeking recreation or health.

This former great center for gambling has witnessed its last game of *trente et quarante* and roulette, under government protection. Thanks to the influence of the kaiser and the laws enacted by the legislative power. The empire is now free from the curse of gambling.

The crown prince, Frederick William ("our Fritz"), and the crown princess, daughter of Queen Victoria, are spending the winter here—the prince for the purpose of convalescing from a severe attack of fever. They are both very popular, and may be seen almost every day on the streets, either driving or walking out with their children in the plainest and most unostentatious manner. In fact, nothing to distinguish them from other well-dressed, respectable-looking citizens.

The winter here has been very mild. With a latitude of 16° north of Cincinnati, the thermometer has been below the freezing point of water only on two different days, and then not more than 4°. I saw a load of beautiful ice on the street a few days ago, which, on inquiry, I found was made at Coblentz by an "ice machine," and that a factory for the same purpose was about being put into operation here. This is certainly in great contrast with the United States during the present season.

MEDICUS.

NOKOMIS, MONTGOMERY CO., ILL., *October* 26, 1872.

EDITOR OF LANCET AND OBSERVER: I was called upon during the month of September last to visit a little boy of some two years old. Disease reported, sore mouth. I examined the boy, found two front teeth out, the gums sloughing away, and, on probing, found the alveolar process giving way under the disease. The roof of the mouth had the color and appearance of a piece of mahogany wood, with here and there a patch upon the body and extremities, giving, on the whole, the appearance of scurvy.

Upon inquiry, I found the general health of the boy had been good, with the exception of perhaps a few chills (this is a malarious district). A little sister told me, while sitting upon her knees some days before, she noticed something between his front teeth; taking a pin, she picked out a grain of wheat, with a sprout of some length to it, and then they noticed, for the first time, the sore mouth and very offensive breath. The mother went to work with her domestic remedies, but all to no avail. I was called, and found the case as above described. I gave the acid carbolic, gtt. x to aqua pura ℥j. M. Apply to parts with a *swab*, and persevere on, twice daily. Also, pot. chlor. saturated solution as a general wash, with directions to give internally three or four times a day. Same in teaspoonsful doses. This they followed out; came for more acid. I visited the patient; the family showed me another incisor tooth, with two pieces of jawbone, one of the size of a medium hazel-nut, the other smaller. I continued treatment, with addition of

Syr. Saza. comp.
" Stillingia, āā ℥iij.
" Ferri iodidi, ʒiv.

M. S. Teaspoonsful three or four times a day.

They reported favorable. I gave the pot. perman. gr. x to ℥iv of water as a wash, and in the space of about four weeks they report well and sound, with a good amount of flesh, for one so poor in flesh as he was.

Query: Was it the fungus from the decay and growth of wheat that caused this scorbutic taint of system (scorbutic I call it; it was very much like cases I saw while a surgeon in the army), or what was it? R. S. STRAIN, M. D.

Selections.

Wiring the Clavicle when Fractured.—It has occurred to me that a metallic suture would better retain a broken collar-bone immovably fixed for reunion, than any method of treatment yet adopted; it may, indeed, be not only the most efficient, but probably the only certain one by which this all-important condition for consolidation can be secured.

A fractured clavicle is confessedly one of the most difficult of all bones to heal, without deformity, and for the sole reason of the impossibility, hitherto, of maintaining the ends of the bony solution in apposition during treatment. The numerous methods suggested to effect this is but proof of the uncertainty in the results obtained; for deformity, without contradiction, is the rule, by whatever practice pursued. The wire suture is therefore proposed for keeping the fractured parts in direct contact for reunion.

When we consider the many and great peculiarities in the bone under discussion—its singular shape, the small size of its middle cylindrical portion, where it is most frequently broken, and that, too, obliquely, from indirect violence; its elevated and supported part above the thorax; its exposed position, and then, its being the sole osseous connection of the upper extremity with the body, we can, in some measure, comprehend the frequency of its casualties, and the great trouble in maintaining its fragments in proper position when it is fractured—so much so, that, even by the most skillful of the profession, it is still believed to be an impossibility.

Case.—Mr. A. M. Smith, aged sixty, while in feeble health from intermittent fever of six weeks' duration, was thrown form a mule, July 10, 1872. He fell upon his right shoulder, was insensible some minutes, and on reviving, felt that his collar-bone was broken. In four days, as he said, the soreness having subsided, he went to his neighboring town to consult the doctors. His family physician having explained to him how difficult it was to prevent deformity in such cases, the patient declined to have it then treated by him.

Mr. Smith then came to Nashville, and was operated on before the class of our college, the 19th of October, being one hundred days after his fall; and for the reason that, from the constant pressure in the axilla of the affected side, the circulation and innervation in the soft parts below, were seriously affected, so that he was fast losing the use of the right upper extremity, which was now quite painful and much swollen. The usual deformity existed at the site of the fracture, the other portion of the middle third of the bone, perhaps somewhat exaggerated from non-treatment. The internal or sternal end overlapped the outer or acromion one by an inch, and was now firmly consolidated.

After what preparation could be made by quinine, iron, and hygiene, during the few days allowed for this purpose, assisted by Drs. Buchanan and Van Lindsley, the following operation was performed: The patient being etherized, an incision was made, commencing over the clavicle an inch and a half from where it had been broken, carrying it downward in a curved direction, then upward, to be terminated at a corresponding point on the opposite side of the fracture in this bone. Dissecting up this flap, and turning it over upon the neck, fully exposed not only the overlapping united fragments, but exhibited the location of the subclavian artery below, and external jugular vein above it. With cutting forceps the viciously united clavicle was divided horizontally, its roughened ends squared off, the periosteum carefully divided longitudinally on its upper surface, holes next drilled perpendicularly at half an inch from the fracture, and silver wire passed through them. Reduction was now effected by carrying the shoulder outward, backward, and upward, the wire ligature tied tightly, and its ends pushed into the drilled holes. No hæmostatic agent was required. The flap of integuments was replaced over the clavicle, secured by sutures, and closed accurately by adhesive strips and carbolic lotion. A soft pad was worn in the axilla, the right extremity secured to the chest, and the hand in a sling.

From that time our patient never felt the least movement at the original fracture, nor was there, after this, the slightest crepitation or displacement ever detected.

The soft parts did not unite, by adhesion, but Mr. Smith became again ill with chills and fever, had also an attack of erysipelas, but not at the wound, and remained here forty-one days after the operation. A good opportunity was thus offered for watching the case, which though quite an unpromising one for the experiment, has nevertheless resulted finely. And why not?—for who does not now know the innocuity of the silver wire to the flesh, and how easily it may become incased in callus? I therefore recommend the metallic suture for all fractures of the clavicle, recent or otherwise, believing that the slight exposure made by the operation as described, would not much increase the danger in such cases, wherein the methods now resorted to, fail to keep the ends of the broken bone in apposition.—*Paul F. Eve, in the Nashville Medical Herald.*

Hops as an External Application.—If possessed of any virtue as an anodyne, and popularly hops have great reputation as such, the effect is best obtained by *steaming* a muslin bag full of them, on the side to be applied to the body, until quite soft and damp—not wet. The ordinary method of wringing out in hot water wastes all the strength of the hops, and makes a nasty mess of it. —*Boston Medical and Surgical Journal.*

The Ex-Emperor's Case.—It was naturally to be expected that the medical press would comment freely on a case so full of interest, in many points of view, as that of the late Emperor of the French. It is probable that a man in private life, who in 1870 had been able to command the services of such eminent medical advisers, would have been able also to adopt their counsel. For there can be no doubt whatever of the genuineness in every respect of the report drawn up at that time, and signed by M. See, but never, for some unexplained reason, either signed by the other consultants or presented formally to the Empress. Those gentlemen, MM. Nelaton, Ricord, Fauvel, and Corvisart, must have known, as did M. See, that the Emperor was, from the mere fact of his having a vesical calculus, unfit for the arduous scenes upon which he was about to enter. And, indeed, it must be considered wonderful that the fatal issue was so long postponed, under the excitements and depressions of his subsequent career.

Why lithotrity was preferred to lithotomy by the eminent men who had charge of the Emperor in his last days, does not exactly appear. It seems as if the physical effect of the latter operation would have been more immediately beneficial, while its moral advantage, in the removal of the most palpable, offending cause, would have unquestionably been great. Nor can we think that chloroform was without a hurtful, depressing influence.

The statement that the cause of death was "failure of the heart's action," means nothing at all. "Uræmic poisoning" would have been the obviously accurate phrase for the lesion.

We can not understand why there is no mention, in the report of the *post-mortem* examination, of the condition of the prostate gland. It is merely stated that "the mucous membrane of the bladder and prostatic urethra exhibited signs of subacute inflammation." An exact note of the existence or non-existence of prostatic enlargement should certainly have been placed upon record.

Sir William Gull's additional expression of opinion as to the relation in point of time between the cystitis and the calculous deposit seems to us, if it has any force at all, to be rather a reflection upon the surgical treatment of the case; since the stone certainly existed in 1870, and a cystitis dating so far back would surely have constituted a serious objection to lithotrity.

In conclusion, we can not but contrast this case with that of the Prince of Wales. In the former, the patient's public position seemed to compel him to neglect his physical welfare; in the latter, it may be said to have been the source of his safety. In the former, the precautions which any laborer could have observed had to be thrown entirely aside; in the latter, there was an unlimited command of every resource of care and skill.—*Philadelphia Med. Times.*

A Tale of a Nose.—The readers of surgical works are doubtless familiar with those cases in which the nose is reported, after having been cut off, to have been successfully replaced—in one instance after a dog had run away with it. An interesting example of the reparative power of nature in such an injury is recorded in last week's *Wiener Medizin* (Wochenschr.), by Dr. Malfatti. On November 13, 1871, Lieutenant Preiser, while in barracks, had his nose cut off by a saber. The wound passed through the middle of the cartilaginous part of the bridge of the nose, dividing the left ala along its posterior third, the septum through its middle, and the left ala two lines behind the anterior angle of the nostril. The piece cut off was taken up from the ground where it lay, cleaned with cold water, and reapplied, being secured in its place by means of sutures. A week after the injury a dry scab began to form on the left ala, and extended in the course of three days over nearly the whole nose. Granulations gradually formed, healing went on steadily, and on February 1, 1872, careful examination was required to detect any trace of the injury.—*Brit. Med. Jour., Dec.* 21, 1872.

Shall We Have a Change?—Within three months the annual meeting of the American Medical Association will be held, and as yet we hear no note of preparation toward a change which shall make that body more truly representative of the profession at large in this country, and give it a more authoritative position in regard to the various matters calling for its control. We would again urge the importance—the necessity—of such a change. As long ago as last September, we brought forward the plan proposed by the *Boston Medical and Surgical Journal*, which then, as now, seemed to us to offer great advantages. And we now repeat our appeal to Drs. Gross, Logan, Yandell, Sayre, Davis, and Baldwin, to take the initiative in advocating before the association either this plan or some modification of it. As matters stand at present, there is not a single one of the legitimate objects of such a convention which is accomplished. No other body of men in the United States would be satisfied with such "representation." Let us either have a properly constituted Congress, endued with some powers, and with machinery suitable for their exercise, or let us dispense with the whole concern, abandon all attempt at professional union, and fall behind our age.—*Phila. Med. Times.*

Obituary.

Died, at New Orleans, on the 6th of December, 1872, in the 66th year of his age, *Warren Stone*, M. D., a distinguished surgeon of Louisiana.

At Amiens, his native place, January 10, 1873, from the effects of cerebral hemorrhage, *M. Dubois* (d'Amiens), perpetual Secretary of the Academy of Medicine, the duties of which he has been unable to perform since his attack three years since.

At Paris, January 13, 1873, aged 68, from cancer of the upper jaw, *M. Huguier*, an eminent obstetrician, and formerly surgeon to the Hospital Beaujon.

At London, on February 3, in his 61st year, *Isaac Baker Brown*, well known as the author of a work "On Surgical Diseases of Women;" his labors in behalf of ovariotomy, and for the cure of ruptured perineum, of prolapsus uteri, and of vesico-vaginal fistula, established his reputation as an operative surgeon. In 1855 he was elected president of the Medical Society of London, and in the succeeding year published his work on the "Curability of Some Forms of Insanity, Epilepsy, and Hysteria." He believed that epilepsy and other cognate disorders of the nervous system were caused by unnatural irritation of the clitoris, and that excision of that organ would arrest the disease. He removed the clitoris in a number of cases; the results were not satisfactory, and the operation was condemned by the profession. He was so convinced, however, of the correctness of his views and practice, that he published the above-mentioned work, which resulted in his arraignment before the Obstetrical Society of London for unprofessional conduct, and to his expulsion. After the verdict of the society, his practice, which was previously large and lucrative, rapidly diminished. He made several endeavors to retrieve his fortunes, but successive attacks of paralysis shattered his health, and for the last year he has been utterly helpless.—*Philadelphia Med. News.*

Hugh L. Hodge, M. D., LL. D., died February 26th, of angina pectoris, at his residence, in this city. Dr. Hodge was the son of one of the old physicians of the last century, Dr. Hugh Hodge. The deceased was born June 27, 1796, in the neighborhood of the Delaware front of the city, and has resided in Philadelphia all his life. He was celebrated as an obstetrician, and occupied the chair of Professor of Obstetrics and Diseases of Women and Children in the University of Pennsylvania for about thirty years. He was also the author of "Hodge's System of Obstetrics," and "Diseases Peculiar to Women," both of them occupying a high place as standard medical works. He also wrote a large number of lectures, addresses, pamphlets, and articles for medical journals, and only two days prior to his death was preparing an article for a medical journal. Dr. Hodge was widely known for his original or improved instruments for obstetrical surgery, which have been almost universally adopted in practice, both here and in Europe.—*Philadelphia Medical and Surgical Reporter*.

Editorial.

College Commencements.—We now enter on a new year of candidates for professional preferment. A great many circumstances will come in to decide the success of each individual. In the main, pluck, energy, and capacity will decide the race of qualification and success. Most of these matters are a measure of calculation, as exact as the relations of an algebraic equation. To one and all, of whatever medical school, we extend our greeting; work is before you, the ranks are full, but patiently work for the vacancies.

Miami Medical College.—The annual exercises of this school were held in College Hall on the evening of February 28. Prof. Murphy, the Dean of the Faculty, expressed in a brief way the continued success of the school. After which he introduced Rev. Dr. Nelson, of Lane Seminary, who made the opening prayer. After the ceremony of conferring the degrees—which was performed by Rev. E. House, of the Board of Trustees—an address was made by Hon. Samuel F. Hunt, after which Prof. Kearney made the usual valedictory address on behalf of the faculty.

The following is the list of graduates of this school for 1873:

James W. Billings, Ill.; Alvin W. Boucher, Ohio; Jere. Bowman, Jr., Ill.; John W. Brown, Ala.; William M. Chambers, Jr., Ill.; William C. Chapman, Ohio; Jerry E. Coomer, Ohio; James W. Cormany, Ill.; Edward H. Cowan, Ind.; Lewis N. Davis, Ind.; Amos W. Dowden, Ind.; Samuel Downs, Ohio; Albert M. Drew, Ill.; Firman R. Evans, Ohio; William H. Falls, Ohio; Pinkney French, Mo.; George W. Gardner, Ohio; Isaac E. Gray, Ohio; Fordyce Grinnell, Tenn.; Herman J. Groesbeck, Ohio; George Hamilton, W. Va.; David C. Harrison, Ohio; George W. Harrison, Ky.; H. H. Hering, Ohio; Abdallah M. Howe, Ind.; Samuel S. Humphreys, Ind.; Cummins B. Jones, Ohio; William Judkins, Ohio; William D. Kempton, Ohio; Ferd. Kramer, Ohio; George M. Lambert, Wis.; Lucius R. Landfear, Ohio; Samuel Leeper, Ky.; William G. B. Lewis, Penn.; John M. Logan, Ky.; Robert P. Marshall, Ky.; Eli G. McDivitt, Ohio; John C. McKee, Penn.; Burton A. Mecum, Ind.; George H. Miller, Penn.; Pren. M. Moore, Ill.; William A. Mosgrove, Ohio; Frederick Painter, Tenn.; Harry P. Peebles, Penn.; James K. Pollock, Penn.; Bernard J. Ratterman, Ohio; W. Lewis Ray, Ky.; George W. Reed, Ohio; Francis Richard, Ohio; Francis H. Rowe, Ohio; Leonard A. Shepard, Ohio; Joseph O. Stillson, Ind.; Albert J. Strain, Ohio; William E. Totten, Ohio; John C. Tribbet, Ohio; Henry R. Wilson, Penn.; George F. Wright, Ohio.

Ad Eundem Degree—Nathaniel K. Moxley, M. D., University of Vermont.

The address by Mr. Hunt was peculiarly applicable to the occasion. His topic was essentially the relations of medicine and law, and the distinguished gentleman give due respect to the importance of medicine and law, as compared. The address of Prof. Kearney was a clear, scholarly invitation to correct walk and conversation. His topic had reference to surgery mainly, but the advice given will apply to all the walks of medical life.

The Medical College of Ohio.—This old and well known college has graduated a large class. Dr. Parvin, formerly of the faculty, was made the chief figure for the occasion, and we are free to say, Dr. Parvin added character to the occasion. After the usual exercises, the degree of M. D. were conferred on the following:

Thomas D. Achor, Ohio; J. C. Adams, Illinois; R. P. Alexander, Missouri; O. F. Anderson, Ohio; J. A. Axline, Indiana; Ira F. Barrows, Ohio; W. L. Beebe, Ohio; R. C. Belt, Ohio; J. H. Bingaman, Ohio; F. H. Blooomer, Ohio; Jas. H. Brown, Kentucky; William G. Brayton, Ohio; George Callaway, Montana Territory; W. R. Carson, Ohio; A. B. Charlesworth, Indiana; T. S. Clark, Kentucky; W. A. Cockran, Indiana; W. J. Cochran, Illinois; F. M. Conn, Nevada; J. Dillon, Indiana; E. W. Downs, Ohio; William Dulin, Illinois; Charles Durselen, Michigan; T. O. Edwards, Jr., Ohio; W. S. Ellsberry, Ohio; F. W. Entriken, Ohio; William M. Ewing, Indiana; A. V. Fogery, Ohio; L. J. Forney, M. D., Iowa; G. J. Fredricks, Ohio; B. R. Freeman, Indiana; W. H. Gibbins, Illinois; F. M. Granger, Ohio; J. M. Grant, Kentucky; J. C. Hall, Kentucky; H. O. Hannawalt, Ohio; S. K. Hardy, Indiana; R. L. Hayes, Kentucky; G. W. Hewitt, Indiana; J. W. Hosier, Ohio; O. W. James, Illinois; H. E. Jones, Indiana; J. D. Jones, Jr., Ohio; W. J. Jones, Ohio; Joseph Kindel, Indiana; F. S. Kohler, Pennsylvania; J. W. Knox, Illinois; H. C. Lain, Ohio; John P. Leavell, Ohio; J. P. Lewis, Ohio; Geo. W.

Mason, Ohio; J. H. Matthews, Indiana; James R. Motter, Ohio; M. H. Moughiman, Ohio; Eliab Meyers, Ohio; E. S. Newton, Ohio; E. B. Orr, Kentucky; W. P. Orr, Kentucky; W. H. Parcels, Ohio; D. H. Parker, Ohio; V. R. Porterfield, Ohio; E. W. Quick, Indiana; J. A. Ramson, Indiana; J. M. Reynold, Indiana; S. E. Reynolds, Ohio; W. L. Richards, Kentucky; J. W. Rutherford, Kentucky; B. N. Sanders, Ohio; C. B. Schoolfield, Kentucky; Wm. E. Shaw, Ohio; Jas. S. Shively, Indiana; A. B. Smith, M. D., Iowa; W. B. Smith, Kentucky; W. O. Smith, Illinois; Ed. A. Steeley, Ohio; Chas. Steward, Ohio; J. S. Stone, Indiana; S. H. Sturgeon, Ohio; Wm. H. Swales, Ohio; T. B. Talbot, Indiana; Z. Taylor, Indiana; C. H. Tidd, Ohio; A. McD. Thomas, Indiana; Jno. McK. Thornton, Kentucky; E. B. Vincent, Indiana; N. W. Vaneman, Pennsylvania; A. M. Wassam, Ohio; W. A. Watkins, Ohio; G. M. Weller, Ohio; W. E. Williams, Ohio; H. L. Wilson, Ohio; J. M. Wilson, Illinois.

Ad Eundem—W. D. Hutchings, M. D., Medical Department Asbury University, Indiana; O. G. Selden, Ohio.

The address of Prof. Parvin was very excellent, and often run up to a high degree of eloquence.

The Cincinnati Medical College held its usual commencement, *i. e.*, its half-yearly commencement, February 17, 1873. Dr. Thacker made the address, and the degree of M. D. was conferred on the following gentlemen: W. F. Atwell, Wisconsin; Adolph Blitz, Ohio; J. P. Brandon, Ohio; C. P. Calhoun, Pennsylvania; Jasper Corn, Ohio; R. C. Dewey, Ohio; O. A. Helman, Ohio; J. W. Jennings, Indiana; R. C. Kinnaman, Ohio; W. B. Kroesen, Pennsylvania; James Leslie, Ohio; T. E. Lamping, Ohio; I. N. Lightner, Pennsylvania; A. L. McLeod, Ohio; J. H. McLaughlin, Pennsylvania; George Miller, Ohio; Leonidas Mason, Indiana; T. H. Percy Norcock, North Carolina; O. M. Norman, Ohio; E. P. Patterson, Ohio; F. B. Price, West Virginia; Taylor J. Stewart, Kentucky; Thomas Teague, Ohio; G. I. Woolsey, Georgia.

Personal.—During the absence of the editor, an article appeared in the January number of this journal, headed the "Decline of Chivalry." It was intended as a humorous bit of satire, at the the expense of Drs. Yandell and Gaillard, of Louisville, and we can scarcely understand how any person can become so solemn as to take offense at such a squib; and yet Dr. Gaillard does take offense, and although we wrote a private note of explanation, still he rushes into print in his February number. We desire to enjoy courteous relations with our editorial confreres, and if anybody will suggest to us the proper way, we are ready to make full *amende* to our oversensitive neighbor. Dr. Minor has handed us a card assuming the responsibility of the offending article, but really we do n't think it of enough import for such formality.

In the February number we must simply disclaim the editorial. Probably it was dictated by a similar vein of humor, and while part of it is well enough, we desire to say that some of its statements are not warranted by the facts. In a word, we feel ready to say that no city in this country affords more thorough medical education, and in no city of our knowledge, are the requirements for the doctorate more strict. Of course, it was to be expected that our nearer-home neighbors, who regulate professional tone, would not fail to ventilate our shortcomings, in their usual elegant vernacular.

Payments.—Last year was a bad one amongst medical journalists. The present starts off with us unusually well. Our receipts thus far are at least twenty-five per cent. in advance of corresponding dates of 1872. Still we find many delinquents remaining that we trust will respond at once. Very soon we shall send out claims for old arrears through bank, which we expect our friends will be prepared to honor at once.

University of Syracuse.—The medical department of this university has closed its first session with a fair success. There were about thirty matriculants and six graduates. The commencement exercises were held in "Convention Hall," on the evening of February 12. Dr. Winchel, the chancellor of the university, conferred the degrees, and made a brief and appropriate charge to the new M. D.'s. Professor Pease gave the address in behalf of the faculty. The medical department has a fine library, embracing very many râre old books; also, the foundation for an excellent museum and illustrative apparatus. We suppose it will occupy its permanent building next year. The Reading Term, on the plan of Harvard University, begins March 15, and continues four months. For particulars, address Prof. John Van Duyn, registrar.

Medical Register and Directory of the United States.—As soon as possible, Dr. Butler, of the Philadelphia *Reporter*, will issue a general directory. This will be of great advantage to all professional men and enterprises. It will aid to advance a great variety of professional interests, and we hope our friends in all directions will aid in contributing information and statistics to this publication. Circulars will be sent out in every direction, but physicians will do a good work by forwarding at once to Dr. Butler names, standing, and graduation of the physicians of their respective counties.

The Charleston Medical Journal will be revived at an early date. Dr. E. P. Porcher assumes the editorial management. We trust this indicates a new and worthy career of our Southern confreres. We shall welcome the Charleston *Journal* to our table with very sincere pleasure.

Zanesville Academy of Medicine.—We are glad to see that our Zanesville friends have commenced arrangements for a *permanent home*, as a medical association. A recent meeting was held to further such a project, and with the character and energy of such men as Hildreth, McElroy, etc., there will be no such word as fail.

Explanation.—Upon our arrival home, we find a vast pile of letters, business and otherwise. Absence will of course explain delay; and the confusion of so many matters will explain any oversights. We have attempted to respond to various requests and commissions, but of course could not answer individually so many letters. If there are still any matters unattended to, we will take pleasure in responding to further letters from our friends.

Miami Medical College—Spring Course.—Elsewhere will be found the regular announcement of the course of instruction for the spring months, commencing March 11th. This course is supplementary to the winter course of lectures, and is thus intended to afford the students a protracted and continuous plan of medical teaching. The problem of improved medical teaching is ever before the profession, is ever the theme of ambitious talkers at annual reunions of medical men. In the meantime our best schools are in various ways, and after their own way, coming up to the needs and requirements of the day. National and State societies make vague resolutions, and members make vague reports; but in the meantime our better colleges are quietly improving their facilities in every way; better illustrations, better clinics, sterner requirements. These are the order of the day—all very patent to whomsoever will compare now with a quarter of a century ago. Then we had six chairs of medicine, and four nominal months' instruction. Such was mostly the case in Cincinnati up to the reorganization of the Miami Medical College in 1865. That school inaugurated a fuller faculty and longer sessions. Under its influence the faculties of the respectable schools in this vicinity are increased to their present extent, with a proportioned extent of time devoted to tuition. So that now the student that will, may receive daily didactic and clinical instruction three-fourths of the year. The only remaining question of practical importance is whether the preceptors will use their diligent influence in favor of schools that are thus working out the only sensible problem of medical education, or will they tacitly encourage their pupils to attend where the fees are cheapest and graduation is easiest.

The Medical Society of the State of New York held its annual meeting in the city of Albany, February 4th, 5th, and 6th, President Dr. C. R. Agnew, of New York, in the chair. A large amount of important business was transacted. Dr. E. M. Moore, of Rochester, was elected president for the ensuing year; Dr. Benedick, vice-president; Dr. W. H. Bailey, of Albany, secretary.

Half-yearly Compendium.—Part XI, January, 1873, is received. Address Dr. S. W. Butler, Philadelphia. Price $3 a year, or with the LANCET AND OBSERVER, $2.

Braithwaite's Retrospect.—Part LXVI, January, 1873, sustains its well-deserved reputation. Price $2.50 a year. W. A. Townsend, Publisher, New York. $2 a year with the LANCET AND OBSEVER.

Half-yearly Abstract.—Vol. LVI. July to December, 1872. Price $2.50 a year; but published in connection with *American Journal Medical Sciences*, *American Journal Abstract*, *and News*, for $6.

Medical and Surgical History of the Rebellion.—Two magnificent quarto volumes, being part first of the Medical and Surgical History of the Rebellion, are just issued. They are of the same character of careful completeness as characterize the various medical "circulars" of the department from time to time. At an early day we shall hope to present to our readers a fuller notice and criticism of this valuble contribution to our literature.

American Medical Association.—The twenty-fourth annual session will be held in St. Louis, Mo., May 6, 1873, at 11 A. M.

The following committees are expected to report:

On Cultivation of the Cinchona-tree. Dr. Lemuel J. Deal, Philadelphia, Pa., Chairman.

On Measures to Prevent the Extension of Diseases of Inferior Animals to Man, and the Sanitary Measures to Arrest the Progress of such Diseases in Animals. Dr. A. W. Stein, New York, N. Y., Chairman.

On the Treatment of Fractures. Dr. Lewis A. Sayre, New York, N. Y., Chairman.

On Gunguillia, a Substitute for Quinia. Dr. William Chew Van Bibber, Baltimore, Md., Chairman.

On Gynæcology. Dr. Montrose A. Pallen, St. Louis, Mo., Chairman.

On the Renewal of Prescriptions without Authority, and on the Relations of Physicians and Druggists. Dr. R. J. O'Sullivan, New York, N. Y., Chairman.

On Vaccination. Dr. T. N. Wise, Covington, Ky., Chairman.

On Skin Transplantation. Dr. J. Ford Thompson, Washington, D. C., Chairman.

On some Diseases peculiar to Colorado. Dr. John Elsner, Denver, Colorado, Chairman.

On Correspondence with State Medical Societies. Dr. N. S. Davis, Chicago, Ill., Chairman.

On National Health Council. Dr. Thomas M. Logan, Sacramento, Cal., Chairman.

On Nomenclature of Diseases. Dr. Francis Gurney Smith, Philadelphia., Pa., Chairman.

On American Medical Necrology. Dr. J. D. Jackson, Danville, Ky., Chairman.

On Suggestions on Medical Education. Dr. A. M. Pollock, Pittsburg, Pa., Chairman.

On Medical Education. Dr. William Carson, Cincinnati, Ohio, Chairman.

On Medical Literature. Dr. Austin Flint, New York, N. Y., Chairman.

On Prize Essays. Dr. John S. Moore, St. Louis, Mo., Chairman.

On Plan for better Arrangement of Sections, and more rigid Examination of Papers offered for Publication. Dr. E. L. Howard, Baltimore, Md., Chairman.

On Ethics. Dr. H. F. Askew, Wilmington, Del., Chairman.

On the Climatology and Epidemics of Alabama, Dr. T. C. Osborn; Arkansas, Dr. G. W. Lawrence; California, Dr. W. H. Williams; Colorado, Dr. R. G. Buckingham; Connecticut, Dr. J. C. Jackson; Delaware, Dr. L. P. Bush; District of Columbia, Dr. J. W. H. Lovejoy; Georgia, Dr. G. M. McDowell; Illinois, Dr. David Prince; Indiana, Dr. Dugan Clark; Iowa, Dr. G. M. Staples; Kansas, Dr. Tiffin Sinks; Kentucky, Dr. L. P Yandell, Sen.; Louisiana, Dr. S. M. Bemiss; Maine, Dr. S. H. Tewksbury; Maryland, Dr. C. H. Ohr; Massachusetts, Dr. E. Cutter; Michigan, Dr. S. H. Douglas; Minnesota, Dr. Charles N. Hewitt; Mississippi, Dr. S. V. D. Hill; Missouri, Dr. T. B. Lester; New Hampshire, Dr. G. A. Crosby; New Jersey, Dr. E. M. Hunt; New York, Dr. Gouverneur M. Smith; North Carolina, Dr. E. Burke Haywood; Ohio, Dr. J. A. Murphy; Oregon, Dr. Horace Carpenter; Pennsylvania, Dr. W. L. Wells; Rhode Island, Dr. Edward T. Caswell; South Carolina, Dr. M. Simmons; Tennessee, Dr. W. K. Bowling; Texas, Dr. S. M. Welch; Vermont, Dr. G. B. Bullard; Virginia, Dr. H. A. Claiborne; West Virginia, Dr. H. W. Brock; Wisconsin, Dr. J. K. Bartlett.

Physicians desiring to present papers before the association should observe the following rules:

"Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the secretary of the appropriate section at least one month before the meeting which is to act upon them. It shall be the duty of the secretary to whom such papers are sent, to examine them with care, and, with the advice of the chairman of his section, to determine the time and order of their presentation, and give due notice of the same. . . "

OFFICERS OF SECTIONS.

Chemistry and Materia Medica.—Drs. R. E. Rogers, Philadelphia, Pa., Chairman; Ephraim Cutter, Boston, Mass., Secretary.

Practice of Medicine and Obstetrics.—Drs. D. A. O'Donnell, Baltimore, Md., Chairman; Benjamin F. Dawson, New York, N. Y., Secretary.

Surgery and Anatomy.—Drs. Edward Warren, Baltimore, Md., Chairman; W. F. Peck, Davenport, Iowa, Secretary.

Meteorology and Epidemics.—Drs. Geo. Sutton, Aurora, Indiana, Chairman; Elisha Harris, New York, N. Y., Secretary.

Medical Jurisprudence, Hygiene, and Physiology.—Drs. S. C. Busey, Washington, D. C., Chairman; A. B. Arnold, Baltimore, Md., Secretary.

Psychology.—Drs. Isaac Ray, Philadelphia, Pa., Chairman; John Curwen, Harrisburg, Pa., Secretary.

AMENDMENTS TO BE ACTED ON.

(To Constitution.)

Resolved, That the United States marine hospital service be placed in the same relative position in the American Medical Association as the medical departments of the United States army and navy.

And that, in paragraph 2 of the second section, after the words "army and navy," the words "and the United States marine hospital service" be inserted.

(To By-Laws.)

SEC. 3. *Standing Committees.* That, instead of a report on Medical Education, on Medical Literature, and Climatology and Epidemic Diseases, there shall be annually delivered before the Association at its general meetings, an address in Medicine, an address in Surgery, and an address in Midwifery, or the Diseases of Children, the lecturers to be appointed this year by the President; afterward by the Committee on Nominations.

Also, in section 6, after the words, "the chiefs of the bureaus of the army and navy," be inserted "and the supervising surgeon of the United States marine hospital service."

Secretaries of all medical organizations are requested to forward lists of their delegates, as soon as elected, to the Permanent Secretary, W. B. ATKINSON.

The Academy of Medicine elected the following officers for the ensuing year: President, J. H. Tate, M. D.; First Vice-President, A. C. Kemper, M. D.; Second Vice-President, Byron Stanton, M. D.; Recording Secretary, J. W. Hadlock, M. D.; Corresponding Secretary, N. P. Dandridge, M. D.; Treasurer, W. T. Brown, M. D.; Librarian, C. S. Muscroft, M. D.

American Public Health Association.—NEW YORK, *February* 1, 1873. SIR: The Executive Committee of the American Public Health Association are of the opinion that it would not be wise to hold the annual meeting at Washington about the first of March next, as contemplated, owing to the public events then to transpire.

After mature deliberation the committee have decided to fix the annual meeting for Thursday, the first of May next, at Cincinnati, Ohio. This change will enable members to attend also the meeting of the American Medical Association, at St. Louis, Mo., on the following Tuesday, the sixth of May.

A circular will be issued previously to the meeting, announcing the order of business.

By order of the Executive Committee.

ELISHA HARRIS, M. D., *Secretary.*

Executive Committee—Stephen Smith, M. D., President; Edwin M. Snow, M. D., First Vice-President; Elisha Harris, M. D., Secretary; John H. Rauch, M. D., Treasurer; Henry Hartshorne, M. D.; Wm. Clendenin, M. D.; John M. Woodworth, M. D.; Francis Bacon, M. D.; Moreau Morris, M. D.; C. C. Cox, M. D.

Tapping by the Exhausting Syringe.—Some controversy has lately taken place as to the priority of this practice, and Dr. Dieulafoy has thought it worth his while to come to England in order to demonstrate his method. No doubt this practice may be found useful in appropriate cases, and it should be looked upon as an additional resource. But surgeons must not be carried away by a love of novelty, and use the exhausting method in cases likely to do tolerably well without capillary punctures. We know not whether in this country the bladder has been tapped with the exhausting syringe over the pubis in retention, and whether the same method has been employed in pleuritic effusions or empyema; but we find Dr. Dieulafoy stating that this tapping has been used at Paris in dozens of cases of retention, with no harm to the bladder. The capillary punctures were made several times in the same case, without detriment to the patient. But it remains to be seen whether the older methods must completely yield before the new. At all events, caution should be used as to the tapping of joints affected with effusion of serum or blood.—*London Lancet.*

Reviews and Notices.

The Science and Art of Surgery. Being a Treatise on Surgical Injuries, Diseases, and Operations By JOHN ERIC ERICHSEN. A new edition, enlarged and carefully revised by the author. Philadelphia: H. C. Lea, 1873. 2 vols. On sale by Robert Clarke & Co. Price, $11.

The Practice of Surgery. By THOMAS BRYANT, F. R. C. S., Surgeon to Guy's Hospital. Philadelphia: H. C. Lea, 1873. On sale by Robert Clarke & Co. Price $7.25.

Text books of a most satisfactory character are abundant in the surgical department of our profession. Most of them follow much the same routine of plan in their teachings—the chief excellence being in the peculiarities or authority of the individual. The two works named above are of this class, and illustrate very well what we have said. The *System of Surgery*, by Erichsen, is well known to our surgical readers as very complete, and in all respects a most excellent treatise. This new edition has new additions, and brings the work fully up to the improvements of the day. The most important improvement, as compared with American editions heretofore, is offering the work in two volumes.

The work of Bryant aims at placing a *resume* of surgery in one single hand-book. It is large, but embraces a good outline of present surgery in convenient shape.

The Physiology of Man. By AUSTIN FLINT, JR., M. D., Professor of Physiology in the Bellevue Hospital Medical College, New York. Vol. IV: Nervous System. New York: Appleton & Co., 1873.

Heretofore we have noticed the successive issues of this important work as they have appeared. None of them are more important in their researches than this. The continuous views on the physiology of the nervous system are fully brought up—embracing the careful experiments of Dr. Flint himself, who has not only compared original authorities, but has made constant comparative experiments verifying and confirming the observations of others. The volume before us appears, in some of its features, to be the joint labor of both Prof. Flint and Prof. Hammond. One more volume completes the series contemplated, and will be devoted to the special senses and the generative system. The work thus afforded will be an extensive one, but a very complete one, and for the patient medical scholar will be of unusual value. The fifth and last volume will be ready for the press during the present year.

For sale by Robert Clarke & Co. Price, $4.50.

Diseases of the Stomach. By WILSON FOX, M. D., F. R. C. P., F. R. S., etc. London and New York: McMillan & Co., 1872.

This little volume more particularly treats of the "diagnosis and treatment of the varieties of dyspepsia." Naturally, we find included the entire symptomatology and varied diseases of the stomach. More prominently, however, it has been the aim of the author to point out, or "define the conditions of the stomach from which the indigestion of food arises." As these conditions of dyspepsia—and allied disturbances—are among the most troublesome indications which we are called to treat, we have more than usual pleasure in calling attention to this work by Dr. Fox, as well adapted to meet the troubles of practitioners.

For sale by Robert Clarke & Co. Price, $3.

Hand-book of Therapeutics. By SIDNEY RINGER, M. D., Professor of Therapeutics in University College. Third edition. New York: Wm. Wood & Co., 1872.

The volume before us is exclusively devoted to therapeutics. This will at once suggest to the practitioner its value and place in his researches. We have to repeat a criticism made on a former edition, that while its sections are of themselves clear in expression, and all important points well taken, yet there is no plan or system in the work to guide the reader. Thus, we have water, baths, the ice-bag—and nitrous oxide gas—sulphur, etc., as consecutive articles. Thus we find neither any system of classification nor alphabetical arrangement which indicates in any way to the reader the topics he may be in search of. Each article of itself is sufficiently full and explicit, but the appearance of the work is as if the articles had been written separately, thrown into a bag, and printed as they came out. And yet, for reference, the physician will find this a good book to have in his library.

For sale by Robert Clarke & Co. Price, $4.25.

Diseases of the Ovaries: Their Diagnosis and Treatment. By T. SPENCER WELLS. New York: D. Appleton & Co., 1873.

Our readers will recognize in Mr. Spencer Wells one of the foremost ovariotomists of the world, and whatever he says is to be accepted as authority. Several years ago he made a record of 114 cases, which was the contents of a small but valuable monograph of that time, but now out of print. Since that publication, however, his cases have increased to 500. These form the basis of the volume before us, though the work is really rather a systematic treatise than a volume of clinical surgery.

For sale by Robert Clarke & Co. Price, $4.50.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

VOL. XVI.—APRIL, 1873—No. 4.

Original Communications.

Art. I.—Croup.

By W. D. SCARFF, M. D., Bellefontaine, Ohio.

There are perhaps but few diseases to which children are subject that creates greater anxiety on the part of friends and medical attendant than *pseudo-menbranous croup.* The suddenness of attack, rapidity of progress, and too often fatal termination, are considerations in connection with this disease of much importance to society, and to the medical profession a most interesting subject for careful consideration.

A disease of such general prevalence and severity in all parts of the country, which adds to our mortuary list its scores of victims year after year, is entitled, in my opinion, to more attention at the hands of medical men than the profession of late years have seen fit to bestow.

The productions of systematic writers on practical medicine contain pretty much all that has been written upon this subject. Our medical journals seldom contain a thought or suggestion of a practical nature in regard to its pathology or treatment, and the profession in general seem to take it for granted that our knowledge of the subject is thorough and complete, and that further investigation is uncalled for—in short, that the "subject is finished;" while in every community scarcely a winter passes without adding another and another victim to the long list of names already recorded, until the public mind seems to be almost educated up to the point that a certain amount of mortality is a necessity, and may be expected as a matter of course. Now, in view of these surroundings, in this age of scientific progress, may we not hope by mutual effort to diminish the ratio of mortality that this disease in former years has so uniformly recorded?

With this object in view, if a few thoughts gathered from observation and presented in this manner should fail to cast any light upon the subject, I trust that it may at least invite some one who may wield a more instructive pen, and whose observations have been more accurate, to bring to light something of real merit that may be the means of saving the life of some little sufferer that might otherwise have perished.

Perhaps one of the difficulties in the way of the investigation of this disease is the manner in which the term *croup* has heretofore been used in regard to a pathological condition of the mucous membrane of the respiratory tube. The term is used by some to designate a local inflammatory affection of the mucous membrane of the larynx and trachea, giving rise to a peculiar cough, more or less febrile excitement, increased respiration, and the secretion of a viscid tenacious fluid, at times in such quantities as to threaten suffocation by obstructing the glottis, and at other times, though less copious, sufficiently inspissated to give rise to a pseudo-membranous substance—in either case the nature of the secretion being identical.

Others among our standard authors recognize two forms of the disease, differing essentially in the product of the inflammatory action, the secretion in the milder variety being only a muco-purulent fluid. This, in connection with spasm of the interior muscles of the larynx, giving rise to peculiar modifications of voice, cough, and respiration, they are pleased to call *catarrhal* or *false croup*.

In the other variety of this frightful malady to which the name of true or pseudo-membranous croup is applied, it is claimed that the secretion or exudation from the laryngo-tracheal membrane is entirely different in its character from the exudation which occurs in the former variety, and that there is something peculiar in the diseased action more than the ordinary vascular excitement of these membranes, by which they are induced to throw out a plastic material, though the grade of inflammation may be feeble and scarcely sufficient to induce fever—the difference in the character of the exudation or secretion being the only mark of distinction between the two forms of the disease.

The supporters of this latter theory generally admit that the milder variety may, through negligence or inefficient treatment, terminate in the more dangerous form of the disease, and that it is impossible in any case, to determine from the first symptoms which form or variety the malady is about to assume.

Now if the symptoms in both varieties are so nearly identical in the beginning that we are unable to recognize the distinction with any degree of certainty, and this in connection with the tendency or liability of the milder variety to terminate in the more violent form, the evidence would hardly seem sufficient to justify the conclusion that there was really more than one form of the obnoxious secretion. But that, in the main, the constituent elements of this morbid exudation from the mucous membrane of the trachea, is the same in both varieties of the disease, and the tendency in certain cases to greater plasticity of the secretion may perhaps be accounted for upon the principle that in certain conditions of the system the exudation is much more inspissated. and therefore more liable to concentrate in the formation of false membrane. But whatever may be the nature of this secretion, there is no question as to the inflammatory character of the disease, and that the seat of diseased action is in the mucous membranes of the larynx and trachea, from which a tenacious mucous fluid is exuded, of different degrees of consistency, and often so abundant as to impede respiration and threaten dissolution with or without the formation of a pseudo-membranous substance.

If this should prove to be the correct pathology. the danger in this disease does not depend so much upon the grade of inflammatory action as upon the amount or character of the secretion; for, in many instances of a dangerous variety, the inflammatory symptoms may be of a low grade, and apparently under our control, and yet the exudation may continue perhaps with increasing tendency to plasticity, until the larynx is obstructed or closed by the accumulation, and the sufferer perishes purely from suffocation. Among the few uncomplicated fatal cases that have come under my notice, this has been the mode of termination in every single instance.

A description of the symptoms in this disease to the initiated is unnecessary, but to the young practitioner it may be a matter of some interest.

The diagnosis is not generally difficult, especially to those who have once seen a well-marked case of the disease. In all cases the character of the cough is the leading diagnostic symptom, and no matter what may be the degree of febrile excitement or respiratory movement with all other symptoms that are commonly enumerated, the sound of that peculiar shrill, dry, stridulous, indescribable cough, in the beginning, is the most reliable, and perhaps the only true index to the disease.

In regard to treatment, there seems to be but two leading indications to fulfill—to subdue inflammatory action and put a stop to that morbid secretion. The usual antiphlogistic remedies promptly administered must necessarily form the basis of treatment; calomel, with a view to its cathartic and alterative effects, in combination with ipecacuanha in sufficient quantity to induce free vomiting, are the safest remedies in use with which to commence treatment. After vomiting, the patient is generally much relieved; but should inflammatory symptoms continue, and the character of the cough remain unchanged, the same dose may be repeated once or more, if necessary.

In these cases, I much prefer ipecacuanha to tartar emetic, for the reason that in this combination it is equally efficient, and there need be no fear of that dangerous prostration in the tender infant that the tartar emetic is liable to produce.

If the above treatment, in connection with counter-irritants to the throat, should fail to arrest the disease, our next effort should be to check the morbid exudation in the mucous membrane of the trachea by remedies that have a more direct local action over mucous secretion. When the cough and respiration become more difficult and distressing, and the voice whispering, we may rest assured that there is something more than spasmodic action to overcome. The effusion of a tenacious fluid blocking the glottis, or perhaps molding a membrane in the respiratory tube never to be dislodged, are considerations of momentous importance.

The indications are evidently to prevent further effusion, and the formation of false membrane if possible, and to dislodge any plastic material that may have already accumulated in the trachea.

Fortunately there are a few articles that act promptly, and generally successfully, that may be called into requisition in the latter stages of this dangerous disease. These are alum and chlorate of potassa. The first impression made by alum is that of an astringent, by contracting muscular fiber. The minute vessels in the inflamed parts, to wit, the mucous membrane, are compressed, and secretion diminished, not by direct local action on the parts most deeply implicated, but on those adjacent and through contiguous sympathy. It appears also to possess a kind of solvent power over mucous secretion. These impressions, in connection with the emetic action, which is prompt and decisive, are strong inducements for its employment in a disease so threatening as this, and when a decided effect is so much to be desired. Thanks to Dr. C. D. Meigs, of Philadelphia, for having brought to light this valuable remedy. Having used it in practice for a number of years, it is seldom, indeed, that it has disappointed my expectations, and I am well convinced that, in a few cases at least, it has been the means of saving life, when other means in my hands would probably have failed.

In a case of much severity, "of true croup" in the last stages of the malady, being called in consultation with the medical attendant, who remarked that the case was hopeless, alum emetics were the means of saving the life of the little sufferer.

The chlorate of potassa exerts an influence in certain conditions of this disease that I am unable to explain. To call it a refrigerant alterative, is not sufficiently expressive to convey any very definite idea; but the noticeable relief it affords in calming the cough and respiration, denote that it touches a point in the very focus of diseased action that other remedies have failed to reach.

I was first led to the use of this remedy in croup from having witnessed its favorable effects in other diseases implicating the mucous membranes of the mouth or throat.

The rapidity with which it appears to enter the circulation, and the effect it is known to produce on venous blood, changing it to a bright scarlet color, are circumstances worthy of note in considering the manner in which its action is directed to the mucous membranes of the throat and air-passages of the lungs, for which it seems to have a specific preference.

In the limited space of five minutes after having been swallowed, according to the experiments of Isambert, it may be detected in the saliva and other secretions; and perhaps its action through the blood is at once directed to the vascular network of those membranes that are constantly exposed to atmospherical impressions in the act of inspiration, and by the power it possesses in arresting morbid secretion in those parts, as shown by its effects in mercurial salivation, disperse the diseased action that has concentrated in these membranes.

In a case that very recently came under my care and treatment, the most rapid in its progress of any with which I have met for many years, when all other means had proved unavailing, and even the alum emetics, for the first time in my hands, failed to meet the indications, the chlorate of potassa acted promptly in relieving the alarming symptoms, and the patient was saved. In using this remedy in croup, I have not tested its virtue in a sufficient number of cases to speak of its merits in unqualified terms; but so far as a few cases will go in evidence, and particularly the one above mentioned, its curative effects were not only prompt and decisive, but "clear and unquestionable."

My observations in the use of these two remedial agents of which I have spoken, in the treatment of croup, have been confined mainly to the latter stages of the malady, and after the usual antiphlogistic treatment had failed, holding them as a kind of reserved corps, to be brought into action in the heat of the battle. I can not speak of their virtues in the commencement of an attack, not having used them in the onset in any case; but from the direct impressions obtained from their use in a more critical stage of the disease, my confidence in their effects will hereafter call into requisition, at least, the chlorate of potassa at a much earlier period than I have formerly done.

Perhaps I overestimate the value of these articles in croup, but I do not feel like regarding any case as absolutely hopeless until after these remedies have been fully and fairly tried.

Art. II.—Eucalyptus Globulus.

A Thesis presented to the Cincinnati College of Pharmacy for the Degree of Graduate in Pharmacy, March, 1873, by WILLIAM E. KIELY, and recommended to be published.

The specimen from which the following examinations were made, was obtained from the Department of Agriculture at Washington, and from plants cultivated there. They were received in a fresh state, and consisted of the leaves and stem of the plant. They possessed a peculiar aromatic-camphoraceous taste when chewed—taste somewhat resembling that of cajeput; also an astringent after-taste, indicating the presence of tannin. During the examination they were submitted to the following tests:

Experiment No. 1.—One hundred and fifty grains of the dried and powdered leaves were exhausted with ether Q. S. by percolation, and the percolate allowed to evaporate spontaneously. The solid residue weighed 40 grains, or 26.66 per cent. of matter soluble in ether. It was of an oleo-resinous appearance, and colored green from the presence of chlorophyl.

2. The residue from the above was then treated by petroleum benzole, which caused the separation of it into a fluid oily mass (eucalypto), and a hard greenish resin, possessing little or none of the peculiar odor or taste of the plant, or the oily mass separated by the action of petroleum naptha and spontaneous evaporation.

3. The residue, after exhaustion by ether, was then exhausted by percolation with alcohol, and this menstrum extracted from it—25 grains, or 16.66 per cent. extractive matter.

4. The residue, after treatment with alcohol and ether, was then percolated by means of water; the percolate upon evaporation left a solid extract, weighing 16 grains, or 10.66 per cent.

5. The residue from the above was then treated by boiling water, which upon evaporation left 12 grains of dry extract—8 per cent.

6. The residue from the above was then dried and weighed—weight 34.87 per cent. vegetable tissue.

7. Which, upon incinerating, gave 3.13 per cent. ash.

RESUME.

Soluble in ether	26.66
" " alcohol	16.66
" " water	10.66
" " boiling water	8.00
Vegetable tissue	34.87
Loss	3.15
	100.00

Ash in vegetable tissue, 3.13.

8. A portion of the leaves were placed in a retort with water, and submitted to distillation. An essential oil, lighter than water,

was obtained, having the peculiar camphoraceous taste and smell of the plant.

9. One hundred and fifty grains of the substance was exhausted with alcohol by percolation, and the percolate allowed to evaporate spontaneously. A dark-greenish extract was obtained. This was exhausted with water, and the filtered solution tested by means of ferrous sulphate and plumbi-acetate for the presence of tannin. Both tests indicated the presence of it in the above.

10. Fifty grains of the substance was exhausted by percolation, by means of cold water, and gave indications of containing tannin. This was removed by immersing a sheet of gelatine, and then tested for the presence of gallic acid, which ferric-sulphate indicated the presence of in the same.

11. The magma left after the exhaustion of the substance by means of alcohol and ether, was boiled in water, and the filtered solution tested for gum and starch. Tinct. iodine added to a portion of it caused a dark-blue color, indicating starch.

12. And after the precipitation of the tannin by plumbic acetate, in another portion bi-plumbic acetate caused a precipitation, indicating the presence of gum.

13. Another portion of the substance was exhausted by alcohol, and the percolate evaporated and exhausted with water, to which acetic acid was added, and then filtered and tested for the presence of an alkaloid, by solution iodo-hydrargyrate of potassa, which gave no indications of the presence of any.

14. A portion of the substance exhausted by ether and alcohol was boiled with water containing sodium carbonate, and filtered; to the filtrate, hydrochloric acid was added, which caused a curdy precipitate of pectic acid.

15. One hundred and fifty grains of substance was exhausted by alcohol; to the percolate a small quantity of water was added, and the alcohol allowed to evaporate spontaneously; the watery solution was then treated by plumbic acetate in excess and filtered; the filtrate was then treated by sulphydric acid gas, and the sulphide of lead removed by filtration, and the filtrate left to evaporate spontaneously. Nothing presenting a crystalline form was obtained, indicating the presence of a proximate principle.

16. The ash obtained in former experiment was exhausted with water, hydrochloric acid added and evaporated to a small bulk, and bichloride platina added, which caused a yellow crystalline deposit, indicating the presence of potash. After exhaustion with

water it was treated with dilute hydrochloric acid. This solution gave a blue precipitate with—ferrocyanide potassa—iron—and oxalate ammonia a white precipitate—lime. To the liquid filtered from the precipitate of oxalate lime, phosphate ammonia gave a white precipitate—magnesia. The insoluble portion in water and acid. was soluble in liquor potassa, and on the addition of hydrochloric acid to it, gave a white precipitate—silicic acid.

Eucalyptus globulus from the above experiments contains: Fixed and essential oils, resin, gum, starch, pectin, tannin, gallic acid, potash, lime, magnesia, iron, silica.

Ergot and French Midwives.—Considerable attention is paid by recent French journals to a discussion in the Paris Academy of Medicine, about allowing midwives the use of ergot. It appears that ergot has hitherto been on the list of poisons which an apothecary must not dispense, except on the order of a physician. The prefect of police applied to the Academy of Medicine for advice, as to whether it would be well to allow midwives to order and use the drug; and on this took place the discussion, which seems to be characterized chiefly by a manly resolution to yield as little of the prerogative as need be. It was urged and reiterated that ergot, though very useful in some cases, can not be given indiscriminately, and that midwives (even French midwives, especially educated and licensed) have not the discernment necessary for this delicate piece of discrimination. To be sure, the physicians—presumably gifted with the discriminating faculty—in the course of this very debate, expressed very diverse opinions about the indications for the use of ergot; one gentleman hardly ever used it, while others thought that under certain conditions it is very serviceable, administered, of course, with discrimination. And then, again, all the gentlemen knew well enough that it is the practice of most Paris physicians to use ergot in a thoroughly routine way, giving a dose after the birth of every child, to facilitate the after-birth and prevent hemorrhage, a practice which must considerably lighten the mental strain of discriminating. Well, the end was, that the prefect of police was advised that it would be better if apothecaries were not allowed to give ergot on the order of a midwife, except when the order specified that the patient was suffering from dangerous hemorrhage.

Pharmaceutical.

CINCINNATI COLLEGE OF PHARMACY.

J. F. JUDGE, E. S. WAYNE, F. L. EATON,
Editing Committee.

Presuming that many of the readers of the LANCET AND OBSERVER are unaware of the existence of the above-named institution, or, if aware of its existence, are not acquainted with its origin, growth, and present condition, it is thought proper to give, in brief, some account of the same.

It is a fact that will be acknowledged by all physicians and pharmacists, as well as by all intelligent and thinking persons, that there has long been a need for an institution of this kind.

The too frequent occurrence of mistakes in compounding prescriptions, either from carelessness or ignorance, has given rise to an increasing demand for competent and educated pharmacists. The growing intelligence of the country, the better understanding of the duties and responsibilities of the pharmacist, and the development of the science and art of pharmacy, with its collateral branches, from a mere business calling or trade, into somewhat of a professional character, have stimulated young men desiring to engage in the drug business to endeavor to qualify themselves as thoroughly as possible for the skillful and faithful performance of its responsible duties and requirements.

Heretofore, their only means of acquiring a knowledge of the business has been by long-continued and patient service as apprentices (unless they possessed the means to attend one of the pharmaceutical colleges in the East, which but few of them do); and while this actual experience is not to be disparaged, and is, in fact, an absolute necessity, there was felt to be a want of theoretical and scientific instruction to accompany and aid the daily practical work.

This want and its increasing urgency stimulated the pharmacists of Cincinnati to organize and establish the Cincinnati College of Pharmacy.

As far back as 1849, the Cincinnati Pharmaceutical Association was organized. On the 23 of March, 1850, the legislature of Ohio granted a charter to the association under the name of the Cincinnati College of Pharmacy. Soon after, an attempt was made to secure instruction in pharmacy, and a course of lectures was commenced; but the effort proved fruitless, and was, in a short time, abandoned, though the society kept up its regular meetings until in 1861, when the war broke out.

In October, 1871, it was determined to make an effort to reorganize the college; and after a great amount of preliminary work, a course of lectures was begun on the 4th of December, with E. S. Wayne, M. D., Professor of Materia Medica and Pharmacy; J. F. Judge, M. D., Professor of Chemistry, and F. H. Renz, Professor of Botany.

This course was attended by thirty-two students, was very satisfactory, and the efforts that had been made to establish the college were increased to maintain it. During the following summer, announcements of the second session were sent far and wide, and all possible means were used to make it a success beyond a doubt. The faculty for the session of 1872–73 was organized as follows: J. F. Judge, M. D., Professor of Chemistry; E. S. Wayne, M. D., Professor of Materia Medica and Botany, and W. B. Chapman, M. D., Professor of Pharmacy.

The well-known and acknowledged ability of each of these gentlemen did much to attract students to attend the course.

The lectures commenced on the 9th of October, 1872, and continued until the 7th of March, 1873, and were attended by fifty-one students coming from this State, Indiana, Illinois, Kentucky, and Canada. Six lectures were delivered each week during the entire five months. In addition to this, there was given practical laboratory instruction by the faculty.

The college has already become possessed, by purchase and donation, of a large amount of chemical and pharmaceutical apparatus, a complete cabinet of specimens of materia medica, and a full set of botanical charts. In short, students can feel assured of receiving, in this our home school, as thorough practical and scientific instruction in chemistry, pharmacy, materia medica, and botany, as can be afforded in any similar institution in the country.

On the 12th of March, the commencement exercises were held in the hall of the college, No. 259 Walnut street, and were attended by a large and unusually attentive audience.

The president, Prof. J. F. Judge, opened the exercises with a short address, premising that the student of nature early learns that functional development is from the confused and ill-defined, as exhibited in the lower forms of plants and animals, to the more definite and specialized performance of these offices so characteristic of the higher types of organization. He then stated that, in like manner, the history of civilization teaches us that in human affairs there is a like progression; that in the simpler phases of less civilized life the wants of the people are few, and these are satisfied by their own individual, though crude efforts; but as civilization advances, the wants of society and indviduals increase, and these are supplied by a division and specialization of labor and an exchange of products.

After which he showed that the profession of medicine had a like history. That at an early day, the doctor was the collector of the crude roots, leaves and barks of plants, and the minerals that constituted his circumscribed materia medica; that he was the preparer of his own decoctions and compounds, as well as dispenser and prescriber for the ills that flesh is heir to. That in time, the duties of collecting, preserving, and preparing of medicines passed by easy and successive steps into the hands of others, thus giving rise to the occupation of the druggist, and, in time, developing the profession of pharmacy. Thus the physician was gradually released from a class of duties which occupied much of his time, and by this relief, he is enabled to devote a larger share of his time and investigations to the subject of pathology and therapeutics.

In this manner, he showed that from the simpler duties of the herbalist of an early day there had developed two co-related professions of medicine and of pharmacy; that, while the profession of medicine has its scientific and practical sides, so the profession of pharmacy may claim *its* scientific and art phases.

After briefly narrating the history and development of this college in our midst, he conferred the degree of *graduate in pharmacy* on the following named gentlemen: William E. Kiely, Joseph H. Feemster, Charles P. Rendigs, Charles E. Ferris, Gustav Weisbrodt, Andrew W. Bain, Augustus G. Luken, Henry Wagner, John E. Martin, George D. Pinger. All of whom had attended two full courses of lectures, had served four or more years in the drug and apothecary business, and had passed a thorough examination by the faculty and a committee of the board of trustees, and were pronounced duly competent for "*dealing in* DRUGS *and for preparing and dispensing* MEDICINES."

Judge Stallo was then introduced by the president, and delivered the address on behalf of the faculty.

After referring to the fact that, though he had left pursuits kindred to theirs for different ones, he had not lost his interest in his former studies, he assured them of the importance of their profession. He told them that their work was to sustain their own lives and spare the lives of others, and it was therefore of great importance to the communities in which they would settle. Their institution, still in its nascent state, was for acquiring knowledge of a special character to fit men directly for their future work. He believed in such institutions. He had noticed with disapproval the fact that the opportunities for acquiring general culture have increased more than the opportunities for acquiring special culture. General culture, said the speaker, is held in higher esteem than special culture. Especially is this true in our own country. In this fact, we have only the reverse of some of the advantages possessed by this country over Europe. There are no septs in our industrial, as there are no castes in our social system. The shoemaker of to-day may be the preacher or teacher of to-morrow, and the druggist or doctor of the day after. But the world is coming slowly to recognize the need of special training. The druggist who compounds prescriptions from materials which he knows only by the names on the gallipot, is a more dangerous man than the midnight assassin.

I honor this school the more, gentlemen, from the fact that it does not receive aid from the state or city. I expect far-more from an institution which grows out of the necessities of a community or section of country, than from one which springs from the ambitious devices of political bodies.

Everybody is to become a philospher and man of culture on compulsion.

I do not believe that the public will gain at all by the actions of these politicians in these directions. They are very unfit men to manage such a subject, though they may do very well to manage street railroads. [Applause.] Nature lets functions develop organs. The law of nature is spontaneity and self-help.

I desire you to be ambitious in your profession. I desire you to be good druggists; and if it be necessary, in order to be good druggists, for the moment to be nothing else, then, for the moment, be nothing else.

Do not imagine that I am disparaging general education.

There is so much connection and interdependence in the subjects of educational study, that a man who prepares himself thoroughly for his profession will become variedly learned in many other branches. Your studies offer a good example of this point. Sir Humphrey Davy, at one time an apothecary's clerk, was one of the most learned men of his time. I may say the same of Liebig.

I hope that the very earnestness with which you do your work, will lead you to extend your horizon of study.

The speaker referred in eloquent terms to the utilization of the discoveries of the polarization of light, in enabling the chemist at a glance to distinguish cane from grape or fruit sugar, narcotine from nicotine, etc. He spoke of Wollaston's and Fraunhofer's lines in the solar spectrum, whereby, as in a test tube, the materials comprising the distant world could be ascertained, and even the making of Bessemer steel aided. Judge Stallo closed with the exhortation to the class to keep their eyes as well as their hands busy, and they would enjoy as much happiness as ordinarily falls to the lot of man.

Mr. Joseph H. Feemster, of this city, a member of the graduating class, delivered an excellent valedictory address, which closed the exercises.

The Germania Band was in attendance, and filled the intervals of the speeches very acceptably to the audience, which was apparently deeply interested in the subject of the better education and training of our druggists and their assistants.

The third session will begin in October next, with probably the same faculty as the past, and there is every reason to expect a much larger attendance of students than heretofore.

The officers of the college are as follows:

President—J. F. Judge.

Recording Secretary—F. L. Eaton.

Corresponding Secretary—E. S. Wayne.

Treasurer—W. H. Negley.

Trustees—A. J. Tully, Paul Reinlein, Otto Taxis, John G. Fratz, J. M. Ayers, J. D. Wells, H. F. Reum, George Eger.

Hospital Reports.

LONDON HOSPITAL.

REMARKS ON THE ROUTINE USE OF THE OPHTHALMOSCOPE IN BRAIN DISEASE—OPTIC NEURITIS OFTEN EXISTING DEFECT OF SIGHT—RECOVERY FROM OPTIC NEURITIS. BY DR. J. HUGHLINGS JACKSON.

For many years Dr. Hughlings Jackson has urged again and again the *routine* use of the ophthalmoscope in cases of brain disease. In a paper entitled "Observations on Defect of Sight in Disease of Nervous System" (Roy. Lond. Ophth. Hosp. Reports, 1865, vol. iv, part iv. p. 403) he remarks: "It is imperative in all cases of severe cerebral disease—at all events in cases of an acute kind—to examine the eyes with the ophthalmoscope, *whether the patient complains of defect of sight or not.*" Since writing this, seven years ago, he has seen very many cases showing the absolute necessity of routine ophthalmoscopical examination, and is confident that without the use of the ophthalmoscope the diagnosis of the *nature* of intracranial disease—for example, whether it be tumor or not—is in the early stage of many cases next to impossible. Those who do not look into the eyes until the patient complains of defect of sight will overlook optic neuritis very frequently, and probably always its earlier stage.

The intra-ocular condition most frequently discovered in physicians' practice is double optic neuritis; and it is, says Dr. Hughlings Jackson, very common for this condition to exist in a patient who can read the smallest type, and who supposes his sight to be good: there is a marked pathological change without a symptom. It is safer, however, to use the expression without any *obvious* symptom, for Mr. Brudenell Carter has suggested that there may be, at least occasionally, enlargement of the blind spot in these cases of apparently perfect vision. But it remains that there often is no *obvious* defect of sight from optic neuritis; the patient will deny that there is any, and will read the smallest of our test-types (Snellen or Jaeger). Hence, if the ophthalmoscope be not used *by routine* in cases of brain disease, optic neuritis will be constantly overlooked. It is one of those things "not found" because "not looked for." To prevent any misunderstanding, it may be said that the statement as to conservation of vision does not apply merely to slightly abnormal ophthalmoscopical appearances. It applies also to cases in which the discs are much swollen and the edges lost, and in which there may be small, white, shapeless patches and effusions of blood.

Here, it may be remarked that those who are trying to determine whether a disc is slightly "congested" or not, whether the vessels are too full or not, are taking up one of the most difficult tasks in ophthalmoscopy, and one which requires for its proper accomplishment an enormous experience of healthy ophthalmoscopical appearances. Again, reports of cases in which there is stated to be slight hyperæmia or slight anæmia of the discs are are not to be accepted as definite statements, unless the color of the patient's iris and hair is given also, for the coloration of the optic discs varies with the patient's complexion.

A further point of importance is that the changes of neuritis may disappear, the patient's sight remaining good. (It is well known that the ophthalmoscopical changes which sometimes occur in chronic Bright's disease may disappear, but these cases are not here spoken of.)

Since, however, it is no easy matter to determine whether a disc is *absolutely* normal or not, it is safer to say that the appearances remaining after severe neuritis, may be insignificant. This is a matter of very great importance. We will give an illustration. A patient has occasionally epileptiform seizures; if he has no severe pain in the head, and no vomiting, we can usually only conclude that he has some kind of pathological change in his brain which causes instability of gray matter. But if we discover optic neuritis, whether the patient sees well or not, we can then say, almost with certainty, that there is a *coarse* change (glioma, syphiloma, etc.), or, as it is usually put, that there is "organic disease." In such a case the neuritis may, as before said, exist and pass away without causing any defect of sight, so that, unless we use the ophthalmoscope by *routine* (whether the patient has defect of sight or not), we shall now and then overlook one of the most important elements in the diagnosis of the nature of a cerebral lesion.

Dr. Hughlings Jackson believes that recovery from optic neuritis is much commoner (or, in other words, passes off without leaving any defect of sight) than we have hitherto imagined.

Hence a critical examination by the *direct method*, is necessary in all cases of nervous disease where the patient *has had* severe pain in the head, although his sight may never had been affected, and although there may be no *recent* changes in his discs. We do often find trifling changes—white streaks by the sides of the vessels, a little obscurity in the course of some of them, and also, at a little distance from the disc edge, sudden bending of the veins (limits of the previous swelling?) But as yet the interpretation of such changes, when they are slight, is difficult. We can not always be sure they are the relics of past optic neuritis; some of them may be only physiological peculiarities.

The statement that apparently good vision may exist when there is double optic neuritis, is still received with more than incredulity by many; the short reply, "it is impossible," being sometimes considered sufficient. At other times there is a critical silence. It does seem absurd to say of a patient whom we find reading the newspaper, that he has acute or severe optic neuritis (double); but the fact is accepted by ophthalmic surgeons. It was first pointed out by Blessig. In one case, in which Dr. Hughlings Jackson declared there to be double optic neuritis, it was replied, "He [a boy patient] can see a hair on his pillow." But, as already urged, the statement that there are markedly-abnormal ophthalmoscopical appearances, does not involve the implication that sight is defective. In the wards of a hospital it is not at all uncommon, when we take some one to see "a marked specimen of optic neuritis," to find the patient reading. We recently saw in the hospital a woman who spent a good part of her time reading, and who declared her sight to be "beautiful," yet her discs were then much swollen, their edges lost, the veins knuckling over the edge of the disc or rather over the edge of the swelling, which made the so-called disc of about twice its normal diameter. She could read with each eye all the common words of No. 1½ Snellen, and her inability to read the unusual words was evidently owing to defective education; she did not hesitate at any of the latter, but made some kind of a word of each—*e. g.*, for "Gallic" she said "Gentile." Now in this case the optic neuritis was the only trustworthy evidence as to the *nature* of the internal cerebral lesion. The fits she had pointed merely to disease of *some* kind in the cerebral hemisphere, but the optic neuritis showed that that disease was of a *gross* kind (such as glioma, syphiloma).

It is also to be urged that we are not to be content with one or two examinations, for neuritis may come on *after* the appearance of marked cerebral symptoms—after convulsions, for example. In all cases of cerebral disease, where there is severe pain in the head, the ophthalmoscope should be used at every visit, for in such cases optic neuritis is likely to come on. We may here catch the very earliest stage, then trace the neuritis to its climax, and thence either to optic atrophy or to recovery.

In the cases of recovery from neuritis which Dr. Hughlings Jackson has seen, the patients have taken large doses of iodide of potassium. Not one of them had had optic neuritis only, but in addition such symptoms as convulsion. It is to be observed, however, that the cases treated were treated in a very early stage of neuritis when there was no defect of sight. Whether sight would have failed, whether atrophy would have followed, if no iodide had been given, is a question which does not yet admit of answer.

The cases seen by ophthalmic surgeons are different. They see patients whose sight *has failed* more or less, and inferentially cases in which the neuritis is in a later stage, when treatment is likely to be less efficacious. It is probable that in most cases of amaurosis from optic neuritis there is a pre-amaurotic stage, and one in which the ophthalmoscopic appearances differ from those found when sight is defective. The ophthalmoscopic appearances from first to last in cases of neuritis vary very much indeed, so much that those who have not often traced cases from the very beginning might think there were many varieties of neuritis.

The important fact to be insisted on is that *optic neuritis will come on and pass off without there being any defect of sight from first to last.—London Lancet.*

Arsenic in Disease of the Liver.—In a case of disease of the liver (recorded by Dr. de Moura in the *Gaceta Medica de Ballia*), in a patient of cachetic habit, with pallor of the surface, polyuria, want of appetite, and tumefaction of the liver, and in which amyloid degeneration of the organ through syphilitic causes was diagnosed, the administration of arsenic was completely successful after iron, the vegetable tonics, iodide of potassium, and corrosive sublimate had all failed.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

ON NON-PURULENT CATARRH OF THE MIDDLE EAR.

By WILLIAM BARTLETT DALBY, F. R. C. S., M. B. Cantab., Aural Surgeon to St. George's Hospital.

The author commenced by stating that the object of the communication was to direct attention—firstly, to the several conditions under which the Eustachian tubes become so obstructed as to prevent the free passage of air from the pharynx into the tympana; secondly, the various effects which follow catarrh of the tympana; and thirdly, the treatment adopted for these affections of the ear. The notes of cases treated at St. George's Hospital and elsewhere, extending over a period of three years, formed the basis of the paper; and there was an appendix containing an abstract of twenty cases which were considered typical of the disease under notice. When the Eustachian tube only was involved, the appearances of the tympanic membrane most frequently noticed were an increased inward curvature, unusual prominence of the short process of the malleus, and a tilting inward of the handle of this bone. The chief element in treatment was regular inflation of the tympanum, on Politzer's method, until the catarrhal condition had subsided, when the hearing was completely restored. In the next class of cases—viz , when the mucous membrane lining the tympanum was the seat of catarrh—the changes noticed on examination of the tympanic membrane were alterations in curvature, opacities, thinning of the membranes generally, as well as in circumscribed spots, and calcareous degeneration. The author considered that these should be regarded merely as the effects of catarrh, and not, as in the classification adopted by Mr. Toynbee, as separate diseases. Such changes were not of themselves the cause of deafness; the origin of this will be found to be behind the membrane, in the form of accumulations of mucus, and it is to the softening and removal of these that the treatment must be directed. With this view the injection of alkaline solutions into the tympanum was practiced, either by means of the Eustachian catheter, or forced into the cavity of the tympanum with the aid of a Politzer's bag, while the patient performed the act of swallowing—some of the fluid thus used having previously been injected from a glass syringe into the inferior nares of the side to be acted upon. In a large proportion of the cases very considerable improvement in hearing followed; but the author stated that in many there were no appreciable results, for as it was impossible to judge of the precise changes that had taken place behind the tympanic membrane from its appearances, it was difficult to predict what might be the effect of treatment. In some instances an incision was made into the membrane, and the mucus evacuated through the cut by passing a stream of air through the Eustachian tube. Very good results followed this proceeding, but it was only done where more simple means had failed, and there was ample evidence of the mucus being in a fluid state.

Mr. Hinton thought that with regard to children, perforation of the membrana tympani was more frequent than was imagined. He had often used to look when there were no symptoms pointing to this condition, and yet found mischief. With scarcely any pain and no deafness, there might be slight perforation, which would heal up. These spontaneous openings seldom discharge all the matter formed in the inner ear, and it was difficult to keep any opening long patent. After such a healing, therefore, deafness might continue from imprisoned mucus. In cases of accumulation there was also a danger of loss of hearing from interference with the nerve as well as by its mere pressure. Incisions might be made again and again, if necessary, to relieve accumulations. He thought Mr. Dalby's rules as to incision not quite certain. In recent cases we might usually abstain from incision, as the tympanum possesses considerable powers of absorption. Chronic cases were better for operation.

Mr. Harvey asked if they had seen the patients six and twelve months after operation. He had, and the results were not encouraging. It was hard to understand how so much could be removed from such a small cavity as the tympanum. Nothing was said as to constitutional management, though patients often got well with that. Patients were often very ill after the operation, and in some of the cases described he thought the operation was hardly justifiable. Often the disease was syphilitic or rheumatic.

Mr. T. Smith was glad to hear from Mr. Hinton such opinions as regarded catarrh and perforation in children. These perforations are not attended with any great loss of tissue, and are soon got over. He could testify to the good results of the operation, especially when other means had failed.

Mr. Hulke asked how the membrana tympani could be dragged inward when the cavity was full of fluid.

Mr. C. Hawkins asked in what cases Sir Astley Cooper performed perforation of the membrana tympani. He had the instrument Sir Astley used to employ.

Mr. Dalby had tried to distinguish acute purulent from subacute mucous catarrh. Toynbee described maladies as primary which were the result of this. His records of cases extended, some over three years, all over six months. The curvature of the membrana tympani was always increased where the Eustachian tube was closed.

A CASE OF OVARIAN DROPSY OPERATED ON DURING AN ATTACK OF ACUTE PERITONITIS.

By RICHARD T. TRACY, M. D., Lecturer on Obstetrics in the University of Melbourne.

In this paper the author gave an account of a patient aged thirty-one, married five years, the mother of two children, who had noticed the tumor fifteen months. When first seen she was in a hectic condition, with a rapid and feeble pulse, and suffering great pain from the enormous distension of the abdomen. Some relief was at once obtained by tapping and drawing off two quarts of thick colloid fluid (the tumor was multilocular). After the tapping she was removed to the hospital, and carefully examined. She measured thirty-eight inches in circumference, nine inches from the ensiform cartilage to the umbilicus, and eight and a half inches from the umbilicus to the pubes. Her stomach was very irritable, and she had to be supported by nutrient enemata. Her temperature was 102° ; pulse 120; the abdominal tenderness extreme. As it was evident she would soon sink unless something could be done to relieve her, ovariotomy was performed on March 19th. The tumor was multilocular, semi-solid, and almost universally adherent; the peritoneal surface was deeply congested, much thickened, and full of flaky lymph, which was removed in large quantities. The pedicle was secured with a clamp, and the wound closed by deep silk sutures and superficial ones of horsehair. Two hours after the operation there had been a considerable fall in the temperature. On the fourth day there was a large escape of gas and fetid fluid from the wound, and from this time recovery was rapid and finally complete. The author expresses his opinion in favor of bichloride of methylene as an anæsthetic, and recommends the extra-peritoneal treatment of the pedicle by the clamp whenever it is practicable.

Dr. Heywood Smith asked if there was any record of the quantity of blood lost. That sometimes did good.

Mr. Spencer Wells said the letter contained nothing about it; but it was hardly a case where loss of blood was likely to do good. He thought it was remarkable how often patients did well after rupture of the cyst into the abdomen.—*London Lancet.*

OBSTETRICAL SOCIETY OF LONDON.

Dr. Snow Beck read a paper on a case of pelvic hæmatoma, or retro-uterine hæmatocele; with remarks especially as to the source of the hemorrhage.

A woman, aged forty, who had suffered from considerable dyspeptic symptoms, with severe hemorrhoids, who had never been pregnant, and in whom the catamenia had always been profuse, suffered during the periods for the last two or three years from severe pain in the left iliac region. During the last period this pain had been very severe; it suddenly ceased, and a few minutes afterward an oval lump resembling a duck's egg was perceived, firmly pressed against the abdominal wall in the left hypogastrium. This was the uterus. A soft, elastic swelling existed between the uterus and the rectum, bulging forward the posterior wall of the vagina, and presenting a soft depression directly behind the orifice of the uterus. No constitutional symptoms followed, nor anything to indicate inflammatory action. On the seventh day some dark-colored clots and port-wine-colored blood passed with a gush from the rectum; the swelling gradually subsided, and the patient gradually became well. It was concluded that an effusion of blood had suddenly taken place amongst the loculi of the pelvic fascia, probably from the rupture of a congested pelvic vein. The sources from which the blood came in pelvic hæmatoma were considered to be (*a*) rupture of an ovary which had previously undergone some process of degeneration; (*b*) rupture of a Fallopian tube, or the escape of blood from the congested vessels of this part, in which cases the blood would be effused into the cavity of the peritoneum; and (*c*) rupture of some varicose veins. When the vein was situated in the broad ligament the blood might be effused into the pelvic cavity or into the subserous cellular tissue. When the vein was situated in the pelvis the blood was effused in some of the loculi formed by the pelvic fascia. The reputed source of the blood by regurgitation from the uterus through a Fallopian tube, consequent upon some disorder of the menstrual function, was considered highly improbable; and the cases upon which this opinion was founded were closely examined. There was no evidence of this in any of the cases collected by Bernutz and Goupil, except where there was permanent obstruction to the outward flow of the catamenia, and consequent distension of the uterus. And the evidence was equally unsatisfactory in the twenty-seven cases recorded by Dr. Barnes. Some of these cases, with the remarks upon them, were closely examined. In the treatment it was considered unnecessary to interfere where there were no constitutional symptoms, and the effused blood was evacuated by the rectum or the vagina in a short time. But when this fortunate course did not occur, as a general rule it was desirable to procure the artificial evacuation of the effused blood,—when some weeks had elapsed without any signs of decrease in the swelling, when the swelling became more tense, more tender, and more painful, and when the temperature increased, the complexion became of a dirty-yellowish hue, the abdomen swollen and tense, when there were repeated shiverings, vomiting, rapid pulse, etc. The evacuation might be effected by a curved trocar passed in toward the center of swelling, or by free incision into the tumor. As a rule, the rectum was to be preferred to the vagina as the place for the artificial evacuation.

Mr. Scott said that the various opinions which had been expressed as to the true nature of cases published as cases of hæmatocele, indicated in some degree the difficulty of arriving at a correct diagnosis. He had seen cases in which, after a few hours of acute cellulitis, collections of fluid had taken place which would have been difficult to distinguish from hæmatocele, and which yielded, on tapping, clear serous fluid only. Mr. Scott took exception to the statement that no regurgitation occurred from the uterus through the tubes unless there be complete occlusion of the os and cervix, as he thought it could not be doubted that in acute flexions, especially anteriorly, where dysmenorrhœa was very marked, regurgitation was possible.

Dr. Rasch thought an important aid to diagnosis might be found in the temperature. In one case, which came early under his notice, the temperature was for some time between 96° and 97° Fahr., and never rose beyond normal. If, in addition to this, we found fainting, sudden anæmia, and rapid appearance of a doughy tumor near the womb, the diagnosis was clear enough. The uterus, also, though displaced by a hæmatocele, was not so immovable as in cellulitis. He had never resorted to puncture, and thought it would be interesting to know how far an incision had to do with the production of the offensive discharges which had been noticed in some cases.

Dr. Heywood Smith thought sufficient stress had not been laid on the information elicited by the double touch or recto-vaginal examination. Mobility in itself should not be insisted upon, as that might vary in degree, according to the interval of time that had elapsed. With regard to the soft portion referred to, on the anterior aspect of the post-uterine swelling in the case, he asked if it might not be due to the interspace between the two portions of the sacro-uterine ligament.

Dr. Playfair thought the difficulty in diagnosis was between hæmatocele and pelvic-peritonitis. The uterus, however, was apt to be much more displaced and pushed out of its central position in hæmatocele than in pelvic-peritonitis. The uterus might be movable at a very early stage in hæmatocele, but later on, the blood coagulated and the uterus generally became quite fixed. The introduction of the finger into the sac after puncture, to break down the contents, he considered to be attended with a certain amount of risk.—*London Lancet.*

Eucalyptus Globulus in Cases of Intermittent Fever.—Dr. Heller has administered the eucalyptus globulus in doses of from two to seven drachms of the tincture to 432 patients affected with intermittent fever. In 310 cases eucalyptus alone was employed. A small dose was enough to effect a cure in 202 instances, whilst only 108 required a second dose. In 122 cases the drug was employed conjointly with quinine.—*Wiener Medicinische Wochenschrift.*

Selections.

*The Influence of Urmœic and Alcoholic Poisoning on Testamentary Capacity.** *By Stephen Rogers, M. D.*—Near the close of the year 1869, E. I. C. was quietly, if not clandestinely, married to a man whom, report says, her education, religious and secular, would have, in the ordinary course of events, led her to shun, rather than to love.

A key to the secret of this untoward occurrence is furnished by accumulated evidence, to the effect that she was an incorrigible and hopeless inebriate. Though trained, and fairly educated, in one of the best schools for girls, this vice of drunkenness seized her soon after her return home from school, and, as a consequence, she soon became the cause of constant and harassing care to, and her habits were the bane of the last days of, her aged and widowed mother, who died about the date above given, leaving this only child sole heir to a considerable property.

About the time of the mother's death, this rich and dissolute girl was induced to marry, under the circumstances already stated.

Rumor attributes the marriage to a necessity arising from antecedent illicit familiarity between the parties, favored by the intemperate habits—of the girl. However this may be, there is no question that they were married, and the following unusual history commenced. Not long after her marriage, it appears in evidence, she became the victim of attacks which, from the general description given of them by various witnesses, would appear to have been of an hysterical character, more or less modified by her intemperate habits, for these she continued to practice after her marriage with even less restraint than before.

During these attacks she screamed, talked incoherently, and threw herself about so violently as to require control, and she is said to have recovered from them after a few minutes, or at most a few hours, with no perceptible impairment of her intelligence. It also become apparent, not long after her marriage, that she was pregnant, to which fact we may justly attribute a portion of the general and violent nervous perturbation which she at this time suffered. This perturbation was manifested, as before stated, in an especial manner by the attacks, or spells, or fits, or paroxysms, as they are variously named by the witnesses, whose principal features I have already mentioned; and, except these, no alarming symptom occurred to her till about eight months after marriage, though the evidence is conclusive that she had, before this date, suffered many of the aforementioned attacks, and had more than once been on the verge of true delirium tremens. Either from the fear that some of those paroxysms might terminate fatally, or that her uncontrolled intemperance might induce disease which would suddenly terminate her life, or from some other fear or motive, her husband and her father-in-law, who were associated in business, went unknown to her, some months after the marriage, to an attorney, and requested him to draw up a will for her, at the same time giving him instructions as to its provisions. The will was accordingly prepared, and in such terms as to be almost exclusively in the interest of the two parties who had ordered it drawn. They took it, carried it home, and laid it away in a trunk, as the evidence shows. There is no evidence furnished to prove that the alleged testatrix ever read, or heard this paper read, except the declarations of the parties who caused the will to be drawn. It is from them alone that we hear that she even knew of the existence of this paper till almost the hour of her death. Her husband, who, by its terms, was sole heir to her estate, alone says she approved it after reading it, and still months passed, and it was allowed to lie away in his trunk, unexecuted and unwitnessed.

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*Read before the New York Medico-Legal Society.

Thus stood the affairs of this case when, on a Monday, this alleged testatrix exhibited signs of the approach of one of her accustomed ill-turns, which, as already said, the evidence all goes to prove, were the result of alcoholic excesses on a nervous system, rendered more susceptible by the pregnant state. On the following day, Tuesday, she was unusually ill, suffered a number of the paroxysms mentioned, and drank a considerably large amount of alcoholic liquor. She was still worse the following day, Wednesday, but apparently not too ill, in her husband's opinion, to render him incompetent to prescribe for her, though a physician had visited her both Tuesday and Wednesday. On Thursday morning she was so much worse that a second physician was called, who reached her about noon, and found her so seriously ill as to give him great solicitude. He found her suffering nausea and frequent vomiting, insatiable thirst, and a sense of burning at the stomach, great restlessness, getting out of and into bed, muttering, and often noisy delirium, with hallucinations of sight and hearing, though she would obey orders, and reply to simple questions, apparently rationally.

Even up to a very few hours before her death, which took place some eighteen hours after the above visit, when spoken to she would respond, and so far as could be seen, rationally, but in a moment she would again relapse into wandering delirium. It also appears that, up to within a short time before her death, she was able to and did rise from her bed and walk about the room—a tendency her physicians say they tried to restrain, knowing that such efforts, in her exhausted condition, might suddenly destroy her life. There is no evidence I can find that she suffered any paroxysm to which the name of convulsion could be properly applied, during the last two or more days of her life.

A consultation, attended by three physicians, was had at eight o'clock on Thursday evening, and resulted in the conclusion that, among the complications of the case, there was *uræmia.*

We are not, however, informed if there were any dropsical swellings, œdema of the lungs, or if there had been any headache, or even if the urine had been examined by the physicians in attendance. On the contrary, they state distinctly that they did not examine it, but one of them gave some of the urine to an outside party, who testifies that he examined it and found *purpurine.* It is frankly acknowledged by the attending physicians that, up to the hour of the consultation, they had not arrived at a definite diagnosis of the case, and, even after the diagnosis agreed upon at the consultation, there seems to have been much doubt as to its correctness, for, either to ascertain a cause of death, or to corroborate an opinion formed before death, an autopsy was held. In the meager records of this *post-mortem* examination given us, nothing is said of any organ till the stomach is reached, and of this it is stated, that it was found somewhat congested, not much changed from health. It is said that the kidneys were both fatty and the liver extremely so. A dead fetus was found in the womb, and one witness ventures so far as to give his opinion that it had been dead about forty-eight hours. This was of course a very hazardous opinion, if we are to judge it in the light of the fact that there does not occur a particle of evidence that the condition of the fetus was even considered before the death of the mother.

The only testimony I can find, which even alludes to the condition of the fetus before the death of the mother, or to the question of parturient pains, is an equally hazardous statement of one medical witness to the effect that, if the fetus had died three or four days before the mother's death, labor-pains would have come on earlier. Nothing is better known than the fact that a dead fetus may and often does remain in the womb for long and indefinite periods without the occurrence of labor-pains. It does not appear in evidence that the alleged testatrix in this case had labor-pains at all. However, the conclusion from the autopsy was, that death resulted from uræmia, caused by Bright's disease of the kidneys, though no pathological record is offered in support of that *post-mortem* diagnosis, except the vague declaration that the kidneys were fatty, a condition often associated with fatty, light-colored livers in habitual drunkards, but not by any means necessarily accompanied with notable functional derangement of such kidneys. On the other hand, the whole history of the symptoms of the case, as detailed in the evidence, is quite inconsistent with this eleventh-hour *post-mortem* diagnosis. The medical witnesses agree that the condition of the blood known as uræmia, caused by disease of the kidneys, often produces paroxysms, variable in character, sometimes maniacal convulsions, and sometimes, instead, a gradually deepening state of coma. But, to account for the extraordinary and unprecedented fact that in this case the alleged uræmic paroxysms did not induce coma and abolish all sane consciousness, notwithstanding the case terminated fatally, one of the principal medical witnesses employs the following notable language, applicable to the condition of the patient eight or nine hours before death: "It was concluded that she was suffering from uræmia, and it was a subject of remark that the case was exceptional, inasmuch as her mental operations were so clear; it is quite usual in a case of that kind that the contrary should be the case." As a support to this conclusion, one medical witness is reported as saying that he had seen many cases of Bright's disease of the kidneys, and that he had not found the mind generally affected. It is perhaps too much to expect of a judge, or of lawyers, that they should have deemed it important to ascertain if this witness had a tangible and reliable record of a case of Bright's disease of the kidneys, causing uræmic paroxysms in a woman far advanced in pregnancy, and yet which did not, at eight hours before the fatal termination, affect her mind.

I challenge the medical world to produce the record of such a case. If we exclude a few cases in which the pregnant woman, not even suspecting her imminent danger, is suddenly seized with uræmic eclampsia and her life destroyed in a few hours, no case of uræmia terminates fatally in the pregnant woman without seriously affecting the intellect many hours before death ; in other words, fatal cases of uræmia in pregnant women always affect, more or less profoundly, the mental power.

The history of this case, and the pathological history of uræmic *eclampsia gravidarum*, fail to furnish the slightest grounds for the opinion that death was caused by uræmia. Had we even the usual local or general œdema attending Bright's disease, or its fibrine cylinders, and fatty, degenerate renal epithelium in the urine—which we have not—the symptoms of this case, as set forth in the evidence, would be conclusive against the theory of fatal uræmia.

The evidence certainly shows that, from Tuesday to after twelve o'clock Thursday night of the same week, this woman's condition was one of nervous agitation, insomnia, and finally of busy, muttering, and talkative delirium, from which she could be momentarily aroused by speaking to her—a condition rarely or never seen after the development of fatal uræmic eclampsia, and certainly never within twelve hours of the time of death.

Due regard for the well-known intelligence of the physician in attendance and consultation, forbids the conclusion that, even at the consultation on Thursday, nine hours before death, there were not very grave doubts as to how much of a part uræmia played in the production of the symptoms. Had there been no such doubts, the line of treatment, approved by the best authority, would have been (what it was not) purely obstetrical, and obstetrical counsel and means would have been resorted to, which was not the case, so far as the evidence goes. Now, as no such measures were taken, and, so far as the evidence goes, the uterus did not make the slightest spontaneous effort to expel the fetus, it is simply fair to conclude that the diagnosis of uræmia did not take very deep hold on the physicians of the alleged testatrix before her death. Had they adopted that diagnosis, they could hardly expect to be excused for abandoning the patient undelivered—as they did—some five or six hours before her death. Then the practical failure of three intelligent physicians to decide that uræmic poisoning existed in this case during the fatal illness, as well as the symptoms attending the "spells" or "paroxysms" suffered during the last year of life, disproves the theory, which has only the support of a most imperfect and unscientific *post-mortem* examination. Like too many *post-mortem* conclusions where toxical agents have destroyed life, this examination, according to all the evidence, was totally fruitless of truthful results. It did not demonstrate the cause of death.

Having discussed the improbability, if not impossibility, that uræmic poisoning was the cause of death in the case, I will now inquire into the other possible causes of that event.

If the testimony is correct—and it is so abundant both on the part of her medical attendants and others, and so corroborative one of the other, as to be convincing—the attacks from which she suffered during most of her married life, called "spells of fainting," or "spasms," by the witnesses, are very accurately described in most essays on hysteria. The testimony does not inform us whether the alleged testatrix had these paroxysms or fits before she became pregnant. This, however, is not to be regarded as of importance, it being a well-known fact that it is common for women to suffer this, and other forms of nervous attacks, for the first time, after becoming pregnant. There was, however, in this case an especial cause for these nervous attacks—a cause which fortunately is not very frequent among our young and recently married women. I allude to the excessive use of alcohol. It is a fact, well understood by persons conversant with the subject, that habitual inebriety is a fruitful cause of hysterical attacks in women who have no hysteria when sober. On this account alcoholic hysteria is regarded as distinct a form of this neurosis, as alcoholic epilepsy. There is, besides, very conclusive evidence in the case, that this woman had often, during her married life, suffered other results of the excessive use of alcohol than fits of hysteria. By his frequent experience with the attacks, or fits, or paroxysms, of alcoholic hysteria, if not delirium, suffered by his wife, it appears the husband had found out the value of laudanum. It is distinctly declared, by as respectable a witness as the case furnishes, that by order of the husband, she bought ten cents' worth of laudanum for the deceased on Wednesday before her death. It is not proved that she did not take it, and the attending physician contradicts the husband's statement that it was ordered by the physician.

The apothecary who sold this laudanum says that the amount equals twelve doses of opium for the adult, or from twelve to eighteen grains. There is no reliable evidence to disprove that, whatever the physician may have ordered, she took, in addition, this twelve to eighteen grains of opium, and an indefinite amount of alcohol, during Wednesday and part of Thursday.

Now, if the husband had not regarded himself as skilled in the management of the wife's attacks, whatever they may have been —and nothing but experience or special education could have created that self-confidence—he must be regarded as careless, or daring, or criminal, for having assumed to administer a potent drug on his own responsibility; for one of the physicians in attendance swears that, on the morning after this laudanum was purchased, and probably given, he and a neighboring physician found the patient in so critical a condition as to induce them to seek counsel. Taking the most generous view of the facts, in behalf of the husband, we must suppose that his experience with laudanum in her accustomed attacks had given him so much confidence in its efficacy that he was unprepared to appreciate the graver symptoms of her final attack. He probably was unaware of the immediate danger; having seen her recover from so many spells, he presumed she would from this one.

This is the most liberal interpretation of his behavior. But returning to her symptoms, we find them enumerated as follows:

Much nervous and muscular agitation, restlessness, and insomnia; vomiting and insatiable thirst, with a burning pain at the stomach; hallucination of sight and of hearing; muttering and talkative delirium, calling the names of persons absent or dead, and yet replying promptly to questions; obeying the requests of the physicians, and in a moment forgetting them; and finally her ability to walk about the room till near the hour of her dissolution.

It would appear that few experienced medical men could mistake the significance of that array of symptoms, especially when occurring in a person of the admitted habits of this alleged testatrix. The following lines from the great master of clinical description, Dr. Thomas Watson, most aptly and fully hit the symptoms presented by this case:

"If you question the patient about his disease, he answers quite to the purpose; describes in an agitated manner his feelings, puts out his tongue, and does whatever you bid him; but immediately afterward he is wandering from the scenes around him to some others that exist only in his imagination. Generally his thoughts appear to be distressful and anxious; he is giving orders that relate to his business to persons who are absent, or he is devising plans to escape from some imaginary enemy; he fancies that rats, flies, mice, reptiles, or other objects are running over his bed, or that strangers are in his room. He rises to look suspiciously about the room, or to leave his bed, but is readily induced to lie down again.

"Upon inquiring into the history of the patient, in a large majority of instances you will find that he has been an habitual drunkard, and very frequently that from some reason or other this habitual stimulus has been diminished or taken away. Sometimes, however, it comes on in those who are perpetually fuddled, even though they have not intermitted their usual indulgence in drink."—"*Practice of Medicine.*"

The burning pain at the stomach, vomiting, and thirst, which were so marked symptoms in this case, are often absent in alcoholic delirium. But as relates to the mental phenomena, Dr. Watson's general description of delirium tremens comes wonderfully near to meeting every symptom shown by this alleged testatrix during her last illness.

It will be difficult, if not impossible, to account for her symptoms upon any other supposition than that they resulted from alcoholic poisoning. If that cause be admitted, it is very manifest that she was quite *non compos mentis* for at least two days preceding her death. All her declarations, expressed wishes, as respected persons and business, after Wednesday morning, were in all probability mere ravings, and totally unreliable. Among those declarations should probably be placed, that her husband had injured her by striking her in the abdomen, causing a black-and-blue stain. Though two female witnesses testify to this declaration, and to having seen the bruised spot, it is not by any means improbable that they themselves asked her if the bruise had not been made by the husband, to which she answered, "Yes." Persons under this state of mental derangement need only the suggestion, to charge anybody with any act.

The husband denies that the declaration has any foundation, and he is, under the circumstances, by far the more reliable.

The cautious testimony of the physician, who saw her between eleven and twelve o'clock Thursday night, is in all probability the most favorable representation that could be made of her intellectual condition. He declares, under oath, that she was not, in his opinion, able to fix her mind long enough upon any one subject to dictate any article in writing.

It is in evidence, however, that she would reply to questions promptly, and apparently rationally, and would do, so far as she could, anything her physician or friends desired her to. We have seen that such a condition is very far from indicating rationality. In certain states of alcoholic delirium, responses to all manner of questions are obtained. Whether asked if they wish to die, or wish a drink, such persons are very liable to give the same reply —"Yes," or "No;" and the same if asked if they wish to see a priest or a physician. It may, hence, be readily comprehended how the subject of such a condition of mind may be brought to reply "yes," to any number of questions relative to the distribution of property by will; or how, if requested to sign a paper, he would at least make an effort to do so, though it might result in a complete bungle.

This power to respond, and this readiness to obey commands, are terminated sometimes very suddenly by the occurrence of death after some extra effort. In other cases, both the physical and mental power fail gradually, and life does not become extinct till some hours after response and volition have failed. So far as the testimony instructs us, this impossibility of obeying requests, and of intelligent response, was reached in the case of this alleged testatrix about 12 o'clock on Thursday night, and she died about five hours after. It appears that, between 11 and 12 o'clock, having been asked if she would sign a will, she said, "Yes;" the arrangements were at once made, she was held in a reclining position, a pen was put into her hand, the place of signature pointed out, and she was requested to sign, which she did in a very imperfect manner. This having been accomplished, it appears in evidence that either she, or some other party, conceived the idea of adding a codicil. What conscious part she had to do with said codicil may be fairly inferred from the fact that, after responding to some half-dozen lines, of which it consists, she was too near dead to make it practicable to get her signature to it. She died, so far as can be gathered from the testimony, from four to five hours after this effort with the codicil, and died of asthenia. If it be admitted that she was suffering from alcoholic excesses, and that the cause of her death was even only in part of that character, not only the story of her symptoms, but the whole history of the influence of alcoholic poisoning on the intellect, and the accumulated clinical history of alcoholic delirium, go to confirm the opinion that this alleged testatrix had *no conscious appreciation of what she did or said for at least twenty, and probably seventy, hours before death.*

If, however, we admit that there was a uræmic complication, or that uræmia was the chief cause of death, we encounter another unpleasant yet important fact in the case. On Wednesday, the day before the fatal symptoms came on, the ten cents' worth of laudanum was bought and probably administered. Now, it is a recognized fact that the administration of opiates in uræmia is dangerous practice in ever so skilled a hand; and hence, if that were her condition, the result of that medication, on the husband's own responsibility, may have been disastrous, and will now, of course, never be known. It is just to the husband, however, to say that the symptoms on the following day, as described by the witnesses, all contradict the theory that she suffered from uræmia, or that, if she so suffered, she took laudanum on Wednesday.

But it is possible, however unprecedented it may be, for uræmia to be manifested in a rare form in this respect.

There are two points in the case about which the medical testimony and the lay testimony are positive; one is, that the deceased was unable to finish her last will and testament; the other is, that she died of some blood-poisoning, either uræmic or alcoholic, or possibly choleric. The only known circumstance in which the intellect of a person, fatally poisoned with urea, is sound and disposing, a few hours before death, occurs, as I have before said, in those cases where uræmic convulsions come on with little antecedent disturbance, and destroy life suddenly. This was not the case with this alleged testatrix, and therefore the idea that she died of uræmia, without convulsions, yet was of sound mind five hours before death, is quite untenable. The same law applies to the choleric or bile poison. On the other hand, if we accept the theory that her vitality gave way under the destructive effects of alcohol, she had no intellect, in all reasonable probability, for a day or two before death. In either case, we are without the slightest reason that this alleged testatrix had even an approach to a sound and disposing mind and memory after eight o'clock on the Thursday in question.

As this case would lose much of its instructive and practical features if some of the legal history of it were omitted, we will occupy a little time upon it:

As has been stated, there is no evidence, except from the principal heir, that the alleged testatrix knew anything about the contents of the proposed will. There is no evidence that it was read to her at the time she made the blundering effort to sign it. On the contrary, it is stated that it was not read. The parties solely interested in it either dictated it or witnessed it, or both ; the husband, the father-in-law, and the brother-in-law, doing all these offices, and were all associated in business. The unsuccessful attempt to add a codicil was a most trifling matter pecuniarily, the whole amount thereby diverted being but a few hundred dollars.

The court before whom the case was heard, decided that the decedent was, at the time she signed the paper, of sound and disposing mind, and gets over the fact that the parties solely benefited by it should have had all to do with its dictation, and even with witnessing it, in the following way: "However indelicate or impolitic it may have been for the proponent to have persons so nearly related to him, as the subscribing witnesses to the will of his wife, yet they were not disqualified, and I can find no reason in law why their testimony should be discredited, unless there should be other testimony and circumstances than have been presented in this case to weigh against their credibility."

Had the testatrix and proponents of this alleged will been, during the last day of her life, isolated from mankind, in the midst of some desert, or on some rock in the sea, there would be some reason for this attempt of the court to present an excuse for the fact, that the parties witnessing it were closely related to the principal heir, and known to have been indirectly largely benefited by it; but when it is known that these witnesses affixed their signatures to it in the heart of a large city, and at an hour of the day when neighbors, notaries, and lawyers, are at their residences, and easily obtained, he will find it difficult to offer any laudable or legitimate reason for that "impolitic" irregularity.

It is often very useful to take different views of pictures as well as courts. The uncertainties of the law are thereby often shown to be quite as great as those said to be proverbial of medicine.

The same court which issued the above opinion, also, not very far from the same time, issued and subscribed to the following:

"The law is very zealous against straining after probate, when the preparation of a will is made by a party interested, to be executed by a person of doubtful capacity, and requires that, to support such probate, there must be *strong proof of intention out-*

side of the interested party, who claims to have acted under instructions.

"The court must take a cautious view in deciding questions of law and fact. It is an established principle that, where capacity is *doubtful at the time of execution*, there must be proof of instructions or of *reading over*. A man in a languid, torpid state may easily acquiesce in signing his name to a will set before him, more especially when he knows that there is something in the paper which he wishes to take effect; the presumption also is strong against an act done by the agency of the party benefited; the act is not actually defeated, as it was by the civil law, *provided the intention can be fairly deduced from other circumstances*. Though the court will not impute fraud, it will require *strong proof of intention*."

There is no positive or even circumstantial proof that there was any intention on the part of the alleged testatrix to give all her property to her husband. In addition to what has been said in relation to the signing of the alleged will, it may be interesting to further quote from this same court as to the mere signing of a will being an index of the state of soundness of the mind of a testator. In the same opinion, above quoted from, it is said:

"The power to affix a signature to a will, or even to sign checks, does not prove sanity, so far as the law requires, to perform such a solemn act as the making of a last will and testament. They may be merely automatic acts." Such unquestionably was the act of signing the alleged will in this case. The admitting of this will to probate was very clearly a "strain" in violation of all approved rulings, and of previous opinions of the same court.

Courts have the power to give opinions, and the people have a right to decide if those opinions are consistent with common sense and previous rulings, and physicians have an occasional right to say if those rulings are sustained by pathological facts.—*New York Medical Journal.*

Digestion of Starch in Infancy. (*Gaz. Med. Ital.*, November, 1872.)—It has been known that the saliva of newly born animals has not the power of transforming starch into sugar. A recent experimenter has taken the pancreas from kittens and puppies, and has ascertained that the pancreate juice in these animals when young is, like the saliva, incapable of converting starch into sugar. The bearing of this fact on the practice of giving starchy food to very young infants is obvious.

Local Uses of Tannin.—Dr. G. P. Hachenberg (*New York Medical Record*) reports several cases of the use of this remedy in prolapsus uteri, where other means had failed to afford relief. His method is as follows: A glass speculum is introduced in the vagina, so as to push the uterus into its place. Through the speculum a metallic tube or syringe, with the end containing about thirty grains of tannin, is passed. With a piston the tannin is pushed against the uterus, the syringe withdrawn, and the packing neatly and effectually completed with a dry probang, around the mouth and neck of the womb. After the packing is completed, the probang is placed against the tannin, in order to hold it, and the speculum is partially withdrawn. The packing is now fully secured, and the instrument removed.

The application of tannin holds the uterus firmly and securely in place, not by dilatation of the walls of the vagina, but by corrugating and contracting its parts. At first the application may be made weekly; finally, but once or twice a month. It not only overcomes the hypertrophy and elongation of the cervix, but even, the writer thinks, induces a slight atrophy of the parts. As a remedy for leucorrhœa, where the seat of the inflammation is at the mouth of the womb, or within the vagina, it actually gives speedy relief. The doctor also reports a case of chronic ulceration of the rectum, which was cured after a few weekly packings of tannin. He has found, moreover, that in affections of the throat, direct applications of tannin to the diseased parts give satisfactory results. In a case of extraordinary hypertrophy of the tonsils, preparatory to the operation of extirpation, tannin, mixed with tincture of iodine to the consistency of syrup, was applied, with effect of so diminishing the hypertrophy that a surgical operation will, in all probability, not be necessary.

No remedy has given such satisfactory results in certain forms of chronic ophthalmia and opacity of the cornea, as tannin once a week placed under the eyelids—pure, well triturated tannin. An aged lady, who had chronic ophthalmia, was relieved by one application; another, who was blind from opacity of the cornea and chronic ophthalmia, recovered her sight mainly from the local use of powdered tannin.—*Boston Med. and Surg. Journal.*

Is it Necessary to Ligate the Funis?—This question, I am aware, has already been decided in the affirmative by most of the profession, but there are some who still contend that it is useless, and should therefore be abandoned. It is to the latter I would especially address this communication. It does appear to me that this question would be forever determined, could it be shown that a serious hemorrhage was liable to result from neglect of this simple procedure, and that it was impossible to anticipate the result in any given case.

A few days since, I was called to a babe thirty-six hours old, at whose birth a midwife had officiated.

She had applied two ligatures to the umbilical cord, and had divided on the placental side of both. The manner of applying these, viz., by wrapping round and round with fine cotton, and tying the extremities, was such that, just prior to my being called, both ligatures became loose. Upon reaching the child I found one ligature entirely removed, while the other did not constrict the cord in the least, and, as the result, a child literally bathed in its own blood. Upon removing the binding, blood spirted at least three feet. The child was blanched, the extremities were cold, and there was every indication that, unless the hemorrhage be checked, the child would speedily die. A stout cord was immediately applied, and the bleeding ceased. After advising the nurse as to the clothing and nourishment of the child, I left. He has since done well. What I wish to deduce is this: If hemorrhage be possible in a case where two ligatures had been applied, and where both remained for thirty-six hours, is not the danger greatly increased where no ligature is applied?—JOHN T. KING, *A. A. Surgeon U. S Army, in Medical Record.*

When to give Cod-liver Oil.—Dr. Decaisne has endeavored, in a recent communication to the Academie des Sciences, to state with some precision the indications for the employment of cod-liver oil. His deductions are, however, drawn from the observation of a not very large number of facts, viz: twelve cases of rachitis, thirty-six of scrofula, and fifty-two of phthisis. They are thus stated: "1. It is especially in rickets, as many practitioners have already established, that the oil manifests its most indisputable and even curative action. 2. In these three affections, as in all those in which it is applicable, it acts as an analeptic and reconstituent, and as such it may be employed in the treatment of all conditions of the economy characterized by general cachexia, without being especially directed against this or that malady. 3. Desirous of testing as far as possible the statements of Dr. Pollock with regard to the fattening of calves, pigs, and sheep submitted to the oil, I have weighed most of the children slightly affected with scrofula and rickets, before, during, and after treatment; and, like him, I have been able to observe that when the dose exceeds certain limits (variable in the individuals), the weight ceases to increase, and that such cessation coincides with the loss of appetite and the reduction of nourishment. 4. Repeating the experiments of Dr. Greenhow, who states that increase of weight has always ceased in his patients, the subjects of phthisis, after by the use of the oil they had attained their normal weight, I have not obtained the same results as this skillful observer. In several cases, in fact, the normal weight has been surpassed. 5. Contrary to the opinion of some physicians, who profess that the oil is more efficacious when employed in an advanced stage of phthisis, my experience has shown me that it is only of utility in the first, and commencement of the second stage, when there is little or no fever. 6. The oil, when its dose exceeds a certain limit, especially in children, gives rise to a kind of lientery, and it is often found in the stools. 7. Proceeding from the principles now generally admitted—that the digestion and extreme division of fatty bodies constitute one of the functions of the pancreas; that digestion of albuminoid matters is effected by the pancreatic juice; and that the functional activity of this organ is closely connected with that of gastric digestion—I always administer the oil during meals, and not in the intervals."

*Russell on the Diffusion of Enteric Fever by Milk.**—We beg to direct the attention of our readers, and especially to such as are specially interested in sanitary matters, to a very noteworthy report furnished recently on this subject by the medical officer of health for the city of Glasgow—Dr. James B. Russell. In this report it is proved, we might almost say to demonstration, that a localized outbreak of typhoid fever, in one of the suburban villages of Glasgow, was due to the existence, in the family of a dairyman, of a case or cases of this disease, and the contamination thereby of the milk served by the dairyman to his customers. It may be worth while to give a brief sketch of the circumstances of the case, and of the facts which point so strongly to this conclusion. The village of Parkhead, although closely adjoining some of the most crowded parts of Glasgow, retains the character of a country village. The water supply is good, and nothing suspicious could be discovered about the sewerage. In this village an epidemic of typhoid suddenly broke out in January, and, after lasting about a month, seems to have suddenly disappeared. Thus, in December, 1872, there were three known cases of typhoid fever; in January, 1873, there were fifty-three new cases in thirty-nine families; and in February only two new cases were known. Investigation of these cases in January showed that the epidemic had a very definite relation to the supply of milk by one of the dairymen in the district. Of the three cases in December, 1872, one was in the family of this dairyman; and of the families attacked in January, 1873, the large proportion had their milk supply from him. Thus, of the thirty-nine families attacked, thirty-two were so supplied, and these families gave forty-six cases of fever, while only seven families were supplied by others, and they only gave seven cases. This is rendered all the more striking from the fact that only about a seventh of the families in the district were supplied by the dairyman in question, so that the relation of the cases to this source could be no mere accidental one. A still more accurate test than this was resorted to. The epidemic was concentrated in five streets of the village—twenty-four of the thirty-nine families attacked residing in these streets; and it was resolved to take, as it were, a milk-census of these streets. From this it appeared that in these streets the dairymen in question supplied seventy-three families, and of these twenty-two had fever; and that other dairymen supplied a hundred and forty-six families, and only two had fever. There could certainly be no more definite proof than this. One or two other points of corroborative evidence are brought forward at the close of the report, one of which is perhaps worthy of special notice. In two families supplied by the dairyman in question, it was stated that the two individuals seized were the only members of the family who used the milk. In both cases it was used with porridge, while the other members took sour milk or syrup. In connection with these facts, the report makes some remarks on the system, which obtains to a considerable extent in Glasgow, of having dwelling-houses in immediate connection with shops for the sale of provisions; and the medical officer indicates that the department has received instruction to make all such places the subject of frequent visitation. Any case of infectious disease will be at once reported and dealt with.—*London Med. Record.*

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* Glasgow Herald; Medical Times and Gazette; and British Medical Journal, March 15.

Lente on the Antagonistic Effects of Atropia and Morphia.—Dr. F. D. Lente relates (*New York Medical Record*, January 1, 1873) the case of Mrs. O.——, aged forty-eight, whose health was much broken by tertian ague of three months' standing, and who was treated by Dr. Lente with hypodermic injections of quinia. On one occasion, by mistake, instead of a solution of quinia, he injected fifty-five drops of a solution of morphia and atropia, containing very nearly two grains of morphia and one-eleventh of a grain of atropia. In a few minutes she felt faint and giddy, and asked for water. She soon complained of feeling as if she had taken too much wine. Half an hour afterward the patient walked with but little assistance out of the office, got into a light wagon, was driven one-third of a mile to the house of a friend, talking all the way quite rationally and composedly, and finally got out of the vehicle with but little assistance and walked into the house; at this time she complained of nausea, and said she must vomit, but she did not, and the nausea did not recur. The pupils were almost natural—a little dilated perhaps; pulse good; respiration rather slow. Two hours afterward she was lying quietly in bed, with her eyes closed, but not particularly sleepy; pulse 120, full and regular. Half an ounce of whisky was given every half hour. The pupils were more dilated, and acted rather feebly. Three hours and forty minutes after the accident, she had lapsed into almost complete coma. With the greatest difficulty she could be made to swallow. She had had an ounce and a half of stimulant. The respiration was 4½ per minute, irregular; pulse 106, full and regular; the pupils were very slightly dilated and immovable; the mouth was dry, and she had complained of this previously to passing into insensibility. Dr. Lente ordered cool applications to the head, and beef-tea and whisky, an ounce of each *per rectum* every half-hour. Five hours and forty minutes afterward the pulse was 99, full and regular; respiration 5½ per minute, irregular; she could be roused with some difficulty; the pupils remained the same. Six hours and forty minutes afterward she was easily roused, and said she felt pretty well, in a very drowsy way. Pulse 90; respiration 8, fuller and more regular; she could swallow without difficulty. The stimulants were ordered to be given less frequently. Nine hours and thirty-five minutes after the injection she felt very well, except that her head was heavy and her mouth dry; respiration 9½ per minute; the pupils responded very feebly to strong light. She had no relapse.

Dr. Lente cautions against relying too much on experiment with animals, as poisons affect them differently from man. Thus, dogs will take enormous doses of morphia or arsenic without injury; and it is scarcely possible to poison a rabbit with atropia; while arsenic will speedily kill a rabbit, and atropia a dog. He refers to another case, where he administered three hypodermic injections of a solution of morphia and atropia at short intervals, employing in all rather more than a grain of morphia and one-sixteenth of a grain of atropia. In this case the phenomena, though very similar in some respects to those presented by the first-mentioned case, were very different in others. Thus, up to several minutes after the third injection, no marked relief of the pain was noticed, when suddenly the patient lapsed into almost complete coma, which became absolute within half an hour; the pulse was rapid after a time, but not alarmingly weak. The patient was treated with nutritive and stimulating anal injections. As in the case of Mrs. O——, the comatose symptoms disappeared rather suddenly in about six hours. In both cases the pupils were almost normal in size, but quite immovable by the stimulus of light.

Numerous observations lead Dr. Lente to conclude that, for ordinary hypodermic injections, we may safely use two-thirds of a grain of morphia, and one-thirteenth of a grain of atropia, without producing the toxic effects of either drug, and generally without nausea, often excited by morphia alone. He refers to a case reported by Dr. Barker, of Morristown, where the hypodermic injection of morphia was "promptly" successful in the case of a child poisoned with stramonium.—SIDNEY RINGER, M. D., *in London Med. Record.*

Reorganization of the American Medical Association.—Having repeatedly been requested to express my views respecting the reorganization of the American Medical Association—a necessity universally conceded—and believing that the time is at hand when this must be effected or the association be abandoned, I respectfully submit, although not without hesitation, the subjoined remarks as the result of my anxious deliberation upon the subject.

It is well known, both to the members of the association and to the public at large, that since the close of the late war the harmony and deliberations of the association have been disturbed, at every annual meeting, by the introduction and discussion of topics entirely alien to the real objects of such an assembly. Owing to this fact, the very existence of the association has more than once been endangered. At the meeting in Philadelphia, a year ago, many of the oldest and most prominent members, disgusted with previous proceedings, were ready, in the event of a repetition of difficulties, to withdraw, and to unite themselves into an association founded upon a different basis of representation, convinced that the existing order of things, if persisted in, must speedily bring about the destruction of the association. They had become tired of these seemingly everlasting questions about the admission of women and negroes, and other matters equally irrelevant and subversive of good order and good feeling. They saw that the constant reopening of such discussions would inevitably have the effect of impairing the usefulness of the association, and of alienating its members from each other, instead of strengthening, as was the original design of its distinguished founder, Dr. Davis, the bonds of good fellowship, of promoting social intercourse, and of advancing the best interests of a great and noble profession. They saw that political demagogues, from misguided views and a desire to ventilate their philanthropy, were ready, if they could not accomplish their purposes, to sacrifice the association, by driving from its ranks those who were of a different mode of thinking. It was for these reasons that the caucus already alluded to, was held the evening immediately preceding the meeting in this city last year, the men composing it being determined to secede if, in their judgment, it should appear that longer fraternization upon agreeable and profitable terms should be impracticable. Fortunately, although certain elements of discord were, as usual, introduced, and marked our proceedings, wiser counsels prevailed, and the meeting, apart from these disturbances, was in many respects a most pleasant one, long to be remembered by those who enjoyed the hospitality of this great and beautiful city.

The alterations in our constitution, calculated, in my opinion, to meet these contingencies, are:

First, the appointment of a medical council, consisting of not less than ten members, a majority of whom shall be residents of the place of meeting, to whom shall be referred all applications for membership, all questions of ethics, and all other business matters, and whose decision shall be final. Such a body, composed solely of wise, judicious, and experienced men, sitting as a kind of court, or board of censors, should hold office for only one year, elect its own president and secretary, and hold quarterly meetings, the last not earlier than two days before the annual meeting of the association.

Secondly, the association should consist exclusively of members of state societies, who shall be elected at the annual meetings of such societies; the number of delegates to be optional, but not less, if possible, than twenty-five or thirty. They should hold office for one year, but their attendance should entitle them to permanent membership, and to a vote upon every question in the association.

If the *outside* affairs of the assciation were managed by a properly organized council, such as is here contemplated, the result would be to prevent the introduction of a vast amount of irrelevant and objectional matter, which, in the existing state of things, is a source of so much annoyance and irritation, and which so greatly interferes with the deliberations of an assembly of a purely professional character. No society of this kind can long survive if it permits the introduction and discussion of political questions. Medical politicians are not fit representatives of the interests of the medical profession. We want no such men among us.

The method of representation here suggested would have a tendency to stimulate the physicians of the country to unite themselves into county and state societies, thereby accomplishing great good in elevating the character of the profession at large, and unifying its interests as a great body of social and scientific men.

One of the crying evils of the association has been the want of care in regard to the admission of its members. Its doors have swung too easily upon its hinges. While I am, in common with many of our associates, in favor of the widest latitude in this respect, and the strictest observance of democratic principles, we should nevertheless be cautious not to exceed the limits of propriety by the introduction of men not entitled to such a distinction. I have attended two of the meetings of the British Medical Association, and on each occasion I was struck with the fact that the great majority of the members were men who had rendered the profession important services as practitioners, writers, or teachers.

I have long been of opinion that the physicians of the place of meeting of the association should not be taxed with the expenses of a public entertainment; and to relieve them of this burden, for such undoubtedly it is, I suggested, many years ago, that there should be, on the evening of the third day of the meeting, a public dinner, to which every member who chooses should be admitted on the payment of five dollars. This is the custom of the British Medical Association, and there is no reason, so far as I can discover, why a similar practice should not obtain on this side of the Atlantic. A resolution to this effect was, at my instance, adopted with great unanimity by the association a few years ago; and, although it has not been rescinded, I have not been able to learn why it was not carried out by the committee of arrangements at the meeting here last May.

There will always be prominent and liberal-minded citizens at the place of meeting who will be glad to entertain the association at their private dwellings, and will do all they can to make the time of the members pass pleasantly during their sojourn among them. Last year the houses of several of our most wealthy and esteemed physicians were thrown open to the association; and there has not been a meeting since the foundation of the association in which a generous hospitality on the part of our profession was not a marked feature of the occasion.

I have said nothing in this communication respecting the representation, in the meetings of the association, of our medical colleges, hospitals, and various eleemosynary institutions; let them, by all means, be seen and heard, but let them enter through the common door, as the rest of the medical profession—the state medical societies. I have the honor to be, very respectfully, your friend.—S. D. GROSS, *in Medical Times.*

Settling with the Doctor in Texas.—The following story will serve to while away a few moments, and vary the current of thought of our readers a little, perhaps to good purpose. If not entirely apochryphal, we presume it is an exceptional case. *Our* experience with Texas doctors generally is, that they are better paid than this would indicate.

William E. Sweet, a Texas correspondent of the Philadelphia

Press, tells the following story in the course of one of his letters describing a trip through the Lone Star State :

"The roads are fine, and we bowl along on schedule time, reaching Kickapoo Springs in the afternoon of the second day out from Fredericksburg. Here we dine and change mules. The station is kept by Mr. Flanagan, one of the pure, unadulterated Texans. He is worth one hundred thousand dollars, yet lives in a shanty so mean in appearance and in fact, that it would break the heart of a Pennsylvania farmer to be obliged to stable his horses in it. He is tall and gaunt, as becomes a Texan, and has a wife to match. Judging from the number of carroty-headed children that swarm about the door, his quiver must be well nigh full. It is in reference to the latest of these that the story is told, illustrating the character of the paternal Flanagan. He is a dead-shot, and his rifle is his arbiter, yet he does not take any mean advantage. He has been known to drive off a score of Comanches single-handed, thereby saving a guard of fifteen soldiers from imminent peril. Well, when the critical moment in the life of the maternal Flanagan approached for the sixteenth time, Dr. N——, the surgeon of the fort, was summoned. Jim T——, the trader, accompanied him, and while the doctor was professionally engaged, Jim and Flanagan were in the hills. Flanagan having one of those practical minds which are capable of combining business with pleasure, consulted Jim as to the probable charge of Dr. N—— for his services, suggesting twenty five dollars as something handsome. Jim saw his opportunity for some fun, so he very emphatically gave his opinion that it was too much. 'Well, what would be a just and reasonable sum ?' 'Ten dollars would be princely, but five would be enough, for it was only fifty miles.' The question being thus settled on the basis of ten dollars, Jim and Flanagan returned. The event had occurred without mishap, and it was a boy.

"On the following morning, when Dr. N—— prepared to return to the fort, Flanagan called him aside and asked him the extent of the 'damage.'

"'Well, inasmuch as you are an old friend, and your wife is a regular patient, I will charge you only fifty dollars,' rejoined the doctor.

"'I'm a little hard o' hearin',' observed Flanagan, in astonishment. 'Did you say fifty dollars !'

"Dr. N—— proceeded to complete his preparations for the journey back to the post, thinking no more about the matter. As he was about to mount, Flanagan put in an appearance with his trusty rifle in his hand.

"'Doctor,' said he, 'I reckon we'd better settle this here matter now.' And taking him aside, 'You wa'nt agoin' off without a settlement, was you? I do n't want to owe no man nothin'. Here is ten dollars, which I reckon is about the squar' thing. Now, if you ain't satisfied, just get your weepon and come round behind the hill thar, so 's the old woman won't be riled up, and we 'll settle it. I do n't want no man to go 'way from my house dissatisfied, 'specially you, Doc.'

"It is needless to add, etc."

Who are the Managers?—The *Medical Record* recently closed a brief notice of the Transactions of the American Medical Association as follows: "We would make this suggestion to the *managers* of the American Medical Association: First, let the transactions be confined to the reports of committees, abridged by the committee of publication, the lists of members, minutes of the meetings, and other miscellaneous matter. A volume thus constituted would be small and compact, and valuable for reference. Secondly, let the papers read in the sections—if they have any value—be recommended for publication in some medical journal." We do not know who the editor of the *Record* means by *managers* of the association. We find no officers, or committee, or board, with that title, provided for in the constitution or by-laws; and we doubt whether it is either proper or just to make use of such phraseology as implies that the association is under the dictation or control of a few individuals or "managers." It is calculated to impose an unjust responsibility upon a few; and, in the same ratio, to deter members generally from freely exercising their right of perfect equality, both in originating and discussing all matters pertaining to the interests of the association or of the profession which it represents. Neither can we fully approve of either of the writer's suggestions. A volume of transactions, containing only the lists of members, the record of proceedings, and abridgments of the reports of committees, would not be worth the paper on which it would be printed; simply because the *Medical Record*, and every other enterprising medical journal in the country, would have substantially the same matter in their columns, and before the profession, weeks before the committee of publication could get it through the press in official form. We believe the volume of transactions should contain, in addition to the record of proceedings and the official reports of standing committees, all papers read in the sections, embodying original investigations of value in any of the departments of medical science and art. All other papers should be either recommended for publication in some medical periodical, or returned to their authors, as their merits might indicate. And each section, in order to make the discrimination necessary, should refer every paper presented to it to a sub-committee, for detailed examination and final report to the permanent secretary of the association, within thirty days after the adjournment of the annual meeting. And precisely this mode of sifting and classifying the reports and papers presented in the several sections, was provided for by those whom the *Record* is pleased to call "managers" of the association eight or ten years since. On page 674 of the volume of transactions for 1872, at the head of the list of ordinances now in force, are the following resolutions, adopted expressly for the guidance of the sections at the meeting in Boston, in May, 1865:

"*Resolved*, That the several sections of this association be requested, in the future, to refer no papers or reports to the committee of publication, except such as can be fairly classed under one of the three following heads, viz.: First, such as may contain and establish *positively* new facts, modes of practice, or principles of real value. Second, such as may contain the results of well-devised original experimental researches. Third, such as present so complete a review of the facts on any particular subject as to enable the writer to deduce therefrom legitimate conclusions of importance.

Resolved, That the several sections be requested, in the future, to refer all such papers as may be presented to them for examination by this association, that contain matter of more or less value, and yet can not be fairly ranked under either of the heads mentioned in the foregoing resolutions, back to their authors, with the recommendation that they be published in such regular medical periodicals as said authors may select, with the privilege of placing at the head of such papers, "Read to the —— Section of the American Medical Association, on the day of ——, 18—." (*Vide* Transactions, vol. XVI, page 40.)

If these directions were faithfully observed by each section, the resulting volume of Transactions for each year would be "small and compact" enough to satisfy even the *Medical Record.—Med. Examiner.*

Localization of Brain-Functions (*British Medical Journal, October* 19, 1872).—Meynert, one of the ablest of the modern students of the anatomy of the nerve-centers, has sought, by combining phrenological with clinical and pathological observations on the functions of the cortical layer of the cerebral hemispheres, to define to some extent the localization of the different functions in the gray matter of the cortex. He distinguishes five special functional centers. 1. The olfactory lobe or nerve, which, highly developed in animals well gifted with the power of scent, is almost atrophied in man—less highly endowed in this respect. 2. The walls of the fissure of Sylvus. These are in intimate relation with the power of speech, as is found in aphasia, which is the consequence of changes in them. 3. The occipital and temporal lobes. Anatomy shows the relations of these parts with the organs of the senses—the retina, labyrinth, and olfactory nerve. In cases of blindness and deafness rapidly developed, these lobes are the seat of evident alterations. The experiments of Flourens on the ablation of the cerebral lobes support this theory; for, if but little of the substance be removed, the senses are not much affected; but if the ablation be carried deeper, the sensorial functions immediately cease. 4. The frontal lobes. These lobes are the principal seat of motor excitation, as is shown by their anatomical relations with the corpora striata. Besides, in the forms of psychoses which are accompanied by extensive disorders of the motility (general paralysis) these are the most atrophied of all the parts of the brain. The continued need of movement, the agitation of mania, are equally based upon change in the frontal lobes. 5. The cornu of Ammon. This organ plays an important part in the functions of motility, and almost always presents, in epilepsy, conditions of atrophy or sclerosis.

A new edition of "Dunglison's Medical Dictionary," which has been carefully edited by Dr. Richard Dunglison, will shortly be put to press by the publisher. It has been some years, we believe, since this standard work has received thorough revision, and Dr. Dunglison's task has been no light one. Some fifty pages have been added to the volume, making it a perfect cyclopedia of medical information.

Ventilation and Warming.—In a lecture on ventilation, lately delivered before the Franklin Institute, Mr. L. W. Leeds, after detailing the abominations he encountered in his examination of the ventilating arrangements of the Treasury building at Washington, gives the following practical directions concerning provisions for ventilation and warming in the construction of buildings. First, never have long underground fresh-air ducts. Second, never allow a sewer, soil-pipe, foul-air flue, or smoke-flue, to come near the fresh-air supply-flue, for fear of some connection being made between them by carelessness or accident. Third, never heat a building exclusively by currents of warm air. Fourth, always put the heating-flues on the outside walls instead of on the inside walls. Fifth, endeavor strenuously to avoid the fresh-air chamber becoming a common receptacle for all the rubbish of a filthy cellar.

Another Anæsthetic (Jour. of Pharm.; from Wittstein's Viertelj., No. 95, 1873).—*Iodal* ($C_4HI_3O_2$), discovered by Aime more than thirty years ago, which is obtained by acting upon iodine with a mixture of absolute alcohol and concentrated nitric acid, is recommended by Guyot as an excellent anæsthetic, in doses of one to two and a half grammes. It is a colorless oily liquid, resembling chloral in odor; boils at 25° C., and is decomposed by alkalies into iodoform and formic acid.

Professional Risks.—It was stated in the memoir of M. Guersant, read before the Surgical Society of Paris, that that eminent surgeon contracted syphilis through a wound in his finger received while operating upon a patient affected with that disease, and that his death was the ultimate result of the constitutional infection so produced.

Hops as an External Application (*Druggists' Circular*).—If possessed of any virtue as an anodyne, and popularly hops have great reputation as such, the effect is best obtained by *steaming* a muslin-bag full of them, on the side to be applied to the body, until quite soft and damp—not wet.

Dr. Isaac S. Mulford, long a practicing physician and a man of much influence in Camden, N. J., died February 17, aged 73.

The fatal termination of the illness of Mr. Baker Brown, of London, is announced.

Correspondence.

KEWANNA, Ind., *December* 23, 1872.

Editor Lancet and Observer: Not having anything particularly interesting to communicate for publication in the LANCET AND OBSERVER until the present month, I submit the following case of obstetrics, as I do not remember of ever hearing or reading of a similar case in my practice of over thirty years:

Mrs. N. K., aged nineteen years, married, of good constitution, sanguine temperament, sent for me on the 11th instant; had occasional pains, but no permanent contraction of the uterus. After waiting three hours and no change of expulsive pains, I gave her ergot, which increased them; and on examination per vagina, found mouth of os uteri dilated and labor proceeded satisfactorily, until the head of the child was between the superior and inferior straits of the pelvis, when the most violent pains were not sufficient to expel the birth. I apprehended difficulty in the umbilical cord being around some portion of the child's body. After waiting four hours, and no prospects of a natural delivery, it being a second vertex right occepito-acitabular presentation, I decided to deliver with the forceps. As soon as the head was delivered, I found the umbilical cord with a half-hitch, as the sailors call it, around the infant's neck, and the same around the right arm, drawing the arm at every pain around toward the sternum, producing asphyxia in the child by stopping the circulation in the umbilical cord. I removed the forceps, slipped off the cord from the arm, and placed the infant in warm water, producing artificial respiration, and in a few minutes had the satisfaction of presenting the mother with a fine boy, weighing nine pounds.

Both the lady and child are doing well, and no injury, except a slight laceration of the perineum, which is now entirely well, by keeping the patient quiet in bed for one week. This was a primipara, and perhaps may never occur again.

Respectfully yours,

W. T. CLELAND, M. D.

Editorial.

Capital Punishment.—We will doubtless all unite in the opinion, that certainty of execution is the chief value of all penalty. This *uncertainty*, or rather the almost absolute certainty that extreme penalty will not be inflicted, is the encouragement to the murderer that his crime will somehow go unpunished. These questions of criminal law, however, are not so much a matter of professional inquiry or interest, as that other question—how shall the extreme penalty of the law be best fulfilled? The question of humanity should never interfere with the power and influence of law; but if the control of law and the sanctity of humanity can be made to accord, all will certainly say "amen!" If it be well to make death the penalty of certain crimes, the question comes to medical men, how shall this extreme punishment be inflicted so as to meet the requirements of justice and yet avoid unnecessary cruelty in its execution. In various countries, death has been secured by hanging—as in this country—by the garrote, by the guillotine, by shooting. Some experiments by Prof. Brown-Sequard would seem to indicate that death by the guillotine is perhaps one of the most cruel of all known modes. Of course a headless man does not come back to tell us how long or how extremely he suffered; but we are led to infer that the cruelty of this punishment is beyond the general conception. Death by hanging is, to say the least of it, coarse and brutal. Its influence on the public mind can not be elevating or conservative of morals of itself. So we come back to repeat, Extreme punishment, as by death, is only of value, so far as penalty follows close on crime. Now, if death shall continue to be a proper penalty for murder, the question for us, as medical men, to consider, is, how shall death be inflicted? Shall we shoot the culprit, or hang him like a dog, or cut off his head? The displays to morbid appetite in first-class hangings are too notorious to require comment. We respectfully suggest, then, that our professional influence should be exerted to a more rational and decent death penalty. Let the criminal be required to die by chloroform, for example, or the inhalation of carbonic acid gas, quietly, in his cell, surrounded, if you please, by his medical and spiritual advisers. Death by chloroform is sufficiently certain; should not be a matter of public and morbid exhibition; is not cruel; all the requirements of the law are complied with. We demand, then, these two points—certainty of execution and humanity of the manner.

Cincinnati Doctors.—Every now and then an old Cincinnati boy achieves success and fame in a way to be gratifying to old friends. Amongst these, we note the recent appointment of Dr. C. A. Logan, of Leavenworth, Kansas, as minister to Chili. Dr. Logan is a brother of Tom Logan, Esq., of this city, and many of our city doctors remember him in his young days, and will rejoice in his success.

In the last days of the war, one of the surgeons on duty in this city for one or two years, was Dr. S. B. Conover. He was an assistant, on the post of Cincinnati, to the editor of this journal. After the close of the war, he accepted a medical appointment in Florida, and he has remained there ever since to good purpose. In a short time, he became Treasurer of State, a position he held until recently, and amongst the recent entries in the Senate, we see the name of S. B. Conover, United States Senator for Florida. We wish our friend the honorable success his past career would seem so fully to promise.

The State Constitutional Convention and the Liquor Traffic.—Article XVI, section 18, of the Ohio constitution, reads—

"No license to traffic in intoxicating liquors shall hereafter be granted in the State, but the General Assembly may, by law, provide against evils resulting therefrom."

Dr. D. A. Morse, thinking the above does not define clearly the power of the assembly, has suggested the following amendment, which is incorporated in the resolutions passed March 19, 1873, by the State Temperance Convention:

"No license to traffic in intoxicating liquors shall be granted in the State; and the General Assembly shall have power to legislate against such traffic and evils resulting therefrom."

The resolutions adopted are as follows:

"*Resolved*, That we hereby request the coming Constitutional Convention of Ohio to continue the clause in the present constitution, providing that no license to traffic in intoxicating liquors shall be granted in the State, and to give the General Assembly power to legislate against such traffic and the evils resulting therefrom.

"*Resolved*, That we are opposed to any change in the laws of the State, whereby any less legal restraints shall be placed upon the liquor traffic.

"*Resolved*, That as temperance men, we will use our influence in all suitable ways to elevate such men to office as will use their official authority to create and sustain such laws as will most effectually suppress the sale and use of intoxicating liquors."

To Delinquents.—We stated last month that bills for collection of those in arrears would be sent out through bank. There seems to be a little feeling amongst a few of our friends that this is done in a spirit of unkindness. Not at all; our claims are so scattered that we can not employ a regular collector, and we know very well that many of these arrears are a matter of procrastination simply. We thank those subscribers who have so promptly met their bank bills; but we regret to say that we find it difficult to reach many in this way, and we shall be obliged to fall back to the old way in most cases. Therefore, in a short time we will inclose bills to all our patrons, and request their prompt attention. In the meantime, bills reaching them by bank or otherwise, if met, will be thankfully acknowledged.

A Word of Explanation.—We greatly regret the unusual amount of errors which deface the report of the Academy of Medicine, which appears in the last number of this journal. Several words are misspelled, and, by some oversight, all of Dr. McMechan's case of abortion, upon which the discussion was founded, is omitted. Our worthy secretary, Dr. Hadlock, very naturally feels that so bad a mess of it reflects on him as a reporter, hence we make the above explanation, as due to both the secretary and Dr. McMechan.

Eucalyptus Globulus.—Parke Davis & Co., of Detroit, are making a fluid extract of this agent, which may be had of all their agents, and, we suppose, from druggists generally. We had intended to make some editorial notes in this number upon the supposed therapeutical applications of eucalyptus, but as one of our original articles this month is an excellent thesis presented at the recent commencement of the College of Pharmacy in this city, and embraces all that is suggested thus far. We refer readers to that article. We trust our friends will report their experience with this remedy.

Tennessee Surgery.—From a report by Dr. Briggs, of Nashville, we select the following case:

"In the *Nashville Journal of Medicine and Surgery*, vol. vii, page 101, I find the following unique and interesting case, reported by J. S. Dyer, M. D., one of our most distinguished physicians, now residing in Hartsville, Tennessee:

"In September, 1846, I was called to see Wm. Green, aged nine years, of leuco-bilious temperament. On getting the history of his case, I learned that he had had difficulty in passing his urine from the age of three months, if not from his birth. He was suffering with all the symptoms common to urinary calculus.

"Being without instruments, I prepared a sound of common bucket-wire, about four lines in diameter. Thus equipped, my partner, the late Dr. Jas. M. Jetton, and myself, set out to visit our patient, and explore the hidden recesses of his urinary bladder. On introducing the sound, we came in contact with the stone. Finding it very difficult to pass the sound under it, we feared it was encysted. The parents were very anxious to have the stone removed. Dr. Jetton had successfully performed some important operations. Emulous of professional eminence, and encouraged by myself and other friends, he determined on operating. For this purpose our friend Dr. F. H. Gordon, of Rome, was called to assist. He brought his lithotomy instruments, save the largest sized forceps, those being thought too large for the size of the pelvis.

"On the 10th of October, in the presence of a large crowd of neighbors and physicians, at 11 o'clock A. M., the operation was commenced by Dr. Jetton in the usual way of performing the lateral operation. Nothing unusual occurred, save a slight laceration of the urethra, causing it to bleed on introducing the grooved staff, until the bladder was entered and an attempt made to grasp and withdraw the stone. It proved to be too large for the forceps. When partially seized, the blades of the instrument would slip off. For a long time the doctor tried to grasp the stone, but with no other effect than to scrape off the soft external surface and punish the poor little sufferer. The stoutest hearts failed. The tear of sympathy was seen in the eyes of those who seldom wept.

"Fatigued and desponding, the doctor requested Dr. Gordon to take the seat and try to extract the stone. Dr. G. complied, and after two or three fruitless efforts to grasp the stone, he laid aside the forceps, and introduced the index finger to ascertain the shape and size of the calculus. Finding it uncommonly large, he raised it on the finger, so as to make it project the abdomen above the pubis, and show its full size to the crowd. It was about the size of a large turkey-egg, completely filling the cavity of the contracted bladder. Dr. G. then arose from the seat, and declared that no instrument present could remove the stone.

"A council was then held. Some urged that the operation ought to be suspended. But to leave him in this situation, death was inevitable. It would have been better to die under the operation, than to linger out a few more days of painful suffering. The fear of censure, the love of approbation, or benevolence to suffering humanity, urged a continuation of efforts. Dr. Gordon proposed to cleave the stone with the spindle of a common spinning-wheel, which was present. With that suggestion the writer was at once gratified, and convinced that the little sufferer might yet be relieved, and cordially urged its adoption.

"Dr. Jetton made further efforts to crush and extract the stone with the forceps. In the meantime the spindle was procured and prepared by Dr. Gordon, by filing the smaller end in the shape of a stone-cutter's chisel, and not perfectly sharp. The writer proposed it should be wedge-shaped, with a short bevel, and not perfectly sharp, which was readily adopted; and Dr. G. soon reduced the instrument to that shape. He then placed the spindle and a hatchet on the table, saying to Dr. Jetton, 'Here are your instruments, and the only ones at hand capable of removing the stone.' Dr. Jetton feared that the instrument might puncture the bladder, or that the force requisite to cleave the stone might bruise and cause it to slough. It was insisted that both these accidents might be avoided, by grasping the spindle firmly around the whirl with the left hand, and resting it against the ischii of the boy, so that a blow with the hatchet could force the spindle no farther than the approximation of the metacarpal bones of the hand would permit.

"Dr. Jetton now gave the plan a trial, and being much fatigued, requested Dr. Gordon to take the seat again, which he did. With severe pain to the boy, he succeeded, with the right index finger, in placing the long diameter of the stone at right angles with the incision; then having made a blow so as to imprint the edge of the little chisel across the stone, he always felt with the chisel, before each blow, for the cut he had made, and placed the chisel in it. In this way he clove the stone into two nearly equal parts, by means of *between fifty and one hundred heavy blows*. Introducing the largest forceps in the set, except one, he grasped one-half of the stone, with both hands upon the handles, but could not crush it. Dr. Jetton then grasped the handles also; so that both of them grasped with all their power. After bending and straightening the handles several times, they succeeded in breaking the half of the calculus into several large fragments, which were still too large to be passed through the wound. Each fragment required great force to crush it, so hard was the stone. Drs. Jetton and Gordon thus continued to operate conjointly and alternately till the whole calculus was crushed and extracted. The fragments of this huge stone filled a common-sized teacup.

"Thus ended an operation commenced with a bucket-wire for a sound, and finished with a wheel-spindle. After sunset the little patient was put to bed, and an opiate administered. Visited next day, and found with some fever. On the following day, erysipelatous inflammation about the wound, which yielded readily to saturnine lotions. Recovery rapid, but passed the urine and fœces through the wound, for the rectum proved to be injured. In a few days the fœces measurably ceased to pass by the wound, but the urine continued to pass through the fistulous opening that followed. No one thought that he would recover. All rejoiced that he did not die under the operation. The fact that he had been inured to hardships and suffering from infancy, must account for his extraordinary recuperative constitution. A boy raised on fine carpets and feather beds could not recover from such an operation. Yet Billy Green recovered. Yea, he not only recovered, but the fistulous opening healed; and twelve months after the operation, for the first time, he passed his urine per urethram."

Appeal of the Philadelphia Obstetrical Society for Aid in the formation of a Museum of Distorted Pelves, Obstetrical and Gynæcological Instruments.—At a recent meeting of the Philadelphia Obstetrical Society, it was decided to establish a museum, for the collection of deformed and distorted pelves, and for the preservation of obstetrical instruments possessing historical value, or illustrating new methods of treatment.

The society was led to take this action for these reasons:

1. No subject at present possesses more interest to the obstetrician than the study of the various deformities of the pelvis, their mode of production, their influence on the process of parturition,

and the principles which should guide the accoucheur when operative interference is deemed necessary.

The profession is gradually becoming more and more convinced of the influence of contractions, more or less marked, in causing not only tedious and difficult labors, but also in the production of mal-presentations and of many of the accidents of labor.

At present there does not exist any extensive collection of female pelves, by which a comprehensive study of this subject can be successfully undertaken. Feeling, therefore, the importance of such observation, the society proposes to establish a museum, having this object in view, and would therefore earnestly solicit such specimens of contracted pelves as may be in the possession of members of the medical profession, who may be willing to yield the pleasure of individual possession, in order to assist in forming a collection which will allow a wider and more comprehensive survey of this subject. If the original specimen can not be sent, casts or photographs are solicited. In certain cases possessing unusual interest, the society is prepared to offer a pecuniary recompense, should this be desired.

2. Recognizing the fact that various instruments designed for obstetric manipulations, or for the performance of operations in uterine surgery, having been superseded by new and improved models, now possess only an historical interest, the society has determined to collect such instruments and preserve them, as illustrating the progress of this branch of our art in America. We would also warmly urge upon the inventors of new or modified instruments, and upon surgical instrument makers in general, the desirability of presenting to the society specimens of instruments, pessaries, and special mechanical contrivances, which they may be desirous of bringing before the profession.

All objects, whether embraced in the first or second class, will be conspicuously placed in the museum of the society, after having been labeled with an explanatory description, and with the name of the donor.

They will also be carefully preserved, and open to the inspection of all interested in the support and advancement of obstetrics and the kindred branches of medicine.

All objects for the museum may be sent to the secretary of the society, Dr. J. V. Ingham, No. 1,342 Spruce street, Philadelphia, who will at once acknowledge their receipt, and will gladly furnish such additional information as may be desired.

By order of the society.

WM. GOODELL, M. D., *President.*

WM. F. JENKS, M. D.
J. V. INGHAM, M. D.
HORACE WILLIAMS, M. D. } *Committee.*

Death of Dr. George A. Doherty.—On the 13th of March, 1873, Dr. Doherty, of this city, died, at his residence, after a lingering illness. Dr. Doherty was a prominent physician and citizen. He studied medicine with the late Prof. Jno. T. Shotwell, and for years was busily engaged in the practice of his profession. He had been recently elected to the office of coroner, and had just entered upon the duties of his office. Dr. Doherty was a pleasant, generous, and genial gentleman, and his death is a matter of sincere regret among his large circle of friends.

Obituary.—Dr. Hugh L. Hodge, the son of Dr. Hugh and Maria Blanchard Hodge, was born in this city on the 27th of June 1796. His father studied medicine with Dr. Cadwalader, served in the army, subsequently practiced his profession in Philadelphia, where he was a Fellow of the College of Physicians, and died in 1798.

Having graduated with the highest honors at Princeton College, N. J., in 1814, young Hodge studied medicine at the University of Pennsylvania, as a private pupil of Professor Caspar Wistar. He took his degree in 1818, and, as was then a frequent custom, he went to India as surgeon to a merchant-vessel. Returning home, he began the practice of his profession in 1820, and married Miss Margaret Aspinwall, of New York. He became physician to the Southern Dispensary, afterward to the Philadelphia Dispensary, in 1823 physician to the Alm-house Hospital, and in 1830 Obstetric Physician to the Pennsylvania Hospital. His exertions in the cholera hospitals in 1832, obtained the recognition of a vote of thanks and a silver pitcher from the city.

Dr. Hodge's career as a teacher began in 1821, when he took the private anatomical class of Dr. W. E. Horner, who was in Europe. In 1823 he became Lecturer on Surgery at the Medical Institute. But the Professorship of Obstetrics and Diseases of

Women and Children in the University of Pennsylvania, conferred on him in 1835, was the main work of his life. He filled this important post until 1863, with a dignity and faithfulness which many practitioners all over our country will remember, and on his retirement was constituted Emeritus Professor. In 1871 he received the degree of LL. D. from Nassau Hall, Princeton.

A very large family and consultation practice flowed in upon Dr. Hodge, strangers coming to the city, especially from the South and West, to obtain the advantages of his advice and treatment. Few physicians have ever possessed the confidence and love of their patients in a larger degree. His great and varied experience he utilized in the invention and improvement of obstetric instruments; the best-known being his forceps, his pessaries of several forms, and a cephalotribe.

Dr. Hodge's principal literary work was his "System of Obstetrics," a large quarto, containing an admirable exposition of the views which he had so ably presented to his classes for twenty-eight years. This book, which appeared in 1863, had been preceded by a smaller one, on the "Diseases Peculiar to Women," in 1860. During the first few years of his professional life he was one of the editors of the *North American Medical and Surgical Journal*, and contributed to it a number of reviews and original articles. Papers by him appeared also in the *American Medical Journal*, and in the *American Journal of the Medical Sciences;* two of the latter, on "Synclitism of the Fetal Head," excited a good deal of discussion a few years ago. A number of his introductory lectures were also published from time to time: one, on "Criminal Abortion," after being several times reprinted, was lately issued afresh under the title "Feticide." He would have been a much more prolific writer but for the pressure of his professional engagements during so many years.

Dr. Hodge was not only a man of singular modesty, purity, and temperance, but of earnest and devoted piety. He was at the same time positive in his opinions and courteous in defending them. His conscientiousness in the performance of duty in every relation of life was one of the most marked features of his character. To the last he was at work: on the very day that his brief final illness began, he saw patients, and was occupied with his amanuensis in the preparation of an article on "Cephalotripsy."

He died of angina pectoris, after only twenty-six hours of suffering, on the 26th day of February, leaving behind him a character of spotless integrity. Five sons survive him, only one of whom, Dr. H. Lenox Hodge, has adopted the same calling.—*Phila. Med. Times.*

Reviews and Notices.

Manual of Chemical Analysis, as applied to the Examination of Medicinal Chemicals. A guide for the determination of their identity and quality, and for the detection of impurities and adulterations. For the use of pharmaceutists, physicians, druggists, etc., etc. By FREDERICK HOFFMAN, Ph. D., Pharmaceutist in New York. New York: D. Appleton & Co., 1873.

The above somewhat comprehensive title so fully expresses the character of the work before us, as to leave but little necessity for additional comment. Both physicians and pharmaceutists have felt the want of a work of this kind, which should, at the same time, be clearly arranged and still not too voluminous. Part I is devoted to operations and reagents, and affords a "brief outline of a systematic course of chemical analysis, and of volumetric estimation." In the space of about fifty pages, the various processes of ordinary laboratory analysis are presented, and so abundantly illustrated that no one need fail to understand. In Part II we have the principal work of the volume. Directions are here afforded for the examination of the quality and purity of the medicinal chemicals and their preparations. This part of the book is also abundantly illustrated with explanatory wood-cuts. The work is well gotten up, and is certainly very desirable. For sale by Robert Clarke & Co. $3.50.

Wöhler's Outline of Organic Chemistry. By RUDOLPH FITTIG, Ph. D., Nat. Sc. D., Professor of Chemistry in the University of Tubingen. Translated by IRA REMSEN, M. D., Ph. D., Professor of Chemistry, Williams College, Mass. Philadelphia: H. C. Lea, 1873.

This manual is kindred in character with the book just noticed by Dr. Hoffman, and the two very properly go together as complements of each other. The fact that this is a translation of the eighth edition, very sufficiently shows the high esteem with which it is regarded by German students; and notwithstanding the advances that have been made in organic chemistry during the past few years, it will be found that this edition brings everything of importance. The study of the various topics is so systemtically arranged as to commend the book alike to beginners and to those more advanced in the science. Thus, we find, after some necessary introductory matters, a series of groups treated of in their regular order: thus, marsh-gas derivations; benzine derivations, etc., etc. The book concludes with a chapter on animal chemistry, treating of blood, chyle, saliva, gastric juice, etc. Students interested in organic chemistry, will fully appreciate the value of such a manual. For sale by Robert Clarke & Co. $3.00.

Pharmacopœia of the United States.—And now we present one more book having a connection in all respects with the foregoing. The convention for the fifth decennial revision of the pharmacopœia of the United States was made up of delegates from our most influential schools in this country, and met in Washington in May, 1870. We now receive the result of labor in the small volume before us. Many valuable suggestions are given as to weights and measures, circumstances which affect processes, etc., included in the preliminary matter. What is of most importance, however, is the character of revision of this volume of the United States pharmacopœia. The object is to afford a summary of the changes in the *reliable* articles of the materia medica, as also the valuable preparations. A reference to this volume will show that in some respects important changes have been made. New drugs are suggested as of importance; their preparations are to be regarded *pro rata*. Other drugs, heretofore deemed valuable, are by experience thrown out. So the Pharmacopœia is to be regarded as a sort of standard, indicating the present estimate of medicinal substances. No standard work is of more importance to the physician than the regular series of the Pharmacopœia, of which the present is certainly the most complete.

Surgical Diseases of Infants and Children. By M. P. GUERSANT. Translated from the French by RICHARD J. DUNGLISON, M. D. Philadelphia: H. C. Lea, 1873.

This does not purport to be a systematic treatise on general surgery, neither does it embrace even the whole field of infantile surgery. The author, M. Guersant, however, was long connected with the Hopital des Enfants; and the consideration of the various topics embraced in his book, is very much what the author might be supposed to have said from time to time in his clinical lectures.

The diseases treated are just as we find in the surgical treatment of children: thus, tracheotomy in croup; hypertrophy of the tonsils; hare-lip; vulvitis of young children; purulent ophthalmia of the new born; strabismus; tongue-tie; lancing of the gums; We name these as amongst the topics discussed, but many other matters are presented, and we feel very sure, from a superficial examination of the book, that all physicians, in general practice, will find this a valuable addition to their library of reference.

For sale by Robert Clarke & Co. $2.50.

On the Treatment of Diseases of the Skin: With an analysis of eleven thousand consecutive cases. By Dr. McCALL ANDERSON, Professor of Practice of Medicine in Anderson's University. London: McMillan & Co., 1872.

We have no field of practice more vexatious than "skin diseases;" and so whatever will afford light or aid, either in diagnosis or therapeutics, in this direction, will be received by the profession with gratitude. This little book proposes to give a therapeutical and general summary of the author's experience in the treatment of over ten thousand cases of skin disease. Dr. McCall does not present any peculiar classification of skin diseases, but nevertheless he groups his experience in a classification of his own cases. Largely the work may be regarded as clinical, giving, not so much theoretical views and expectations, as the results of personal experience, both hospital and private. We think this little book will prove of advantage to practitioners seeking for guidance in this vexed direction. For sale by Robert Clarke & Co. $1.75.

Illustrations of the Influence of the Mind on the Body in Health and Disease. Designed to elucidate the action of the imagination. By DANIEL HACK TUKE, M. D., M. R. C. P., etc., etc. "There is not a natural action in the body, whether involuntary or voluntary, that may not be influenced by the peculiar state of the mind at the time."—*John Hunter.* Philadelphia: Henry C. Lea, 1873.

The influence of the mind on the various physiological functions is not by any means a new suggestion with medical men. In the present volume, however, Dr. Tuke has made the effort to systematize our knowledge of these influences and make them practically useful as a group of therapeutic agents. To quote from the author's perface, he states the following objects:

"1. To collect together, in one volume authentic, illustrations of the influence of the mind upon the body, scattered though various medical and other works, however familiar to many these cases may be, supplemented by those falling within my own knowledge.

"2. To give these cases fresh interest and value by arranging them on a definite physiological basis.

"3. To show the power and extent of this influence, not only in health in causing disorders of sensation, motion, and the organic functions, but also its importance as a PRACTICAL remedy in disease.

"4. To ascertain as far as possible the channels through, and mode by which this influence is exerted.

"5. To elucidate, by this inquiry, the nature and action of what is usually understood as the imgination."

As would be expected from such an author, the work is not only arranged on this systematic plan, but is full of readable matter, of interest alike to the physician and the general reader. For sale by Robert Clarke & Co. $3.25.

Epidemic Cerebro-Spinal Meningitis. By MEREDITH CLYMER, M. D.—This essay will be valuable to those who are engaged in the study of this epidemic everywhere, although the author has based his views upon its manifestations, as exhibited in the recent prevalence of the disease in New York city. The brochure is handsomely printed, and accompanied with a map of the city of New York, showing the localities of the disease. For sale by Robert Clarke & Co. $1.00.

Practical Lessons in the Nature and Treatment of the Affections produced by the Contagious Diseases, etc. By JOHN MORGAN, A. M., M. D., University of Dublin, etc. Philadelphia: J. B. Lippincott & Co., 1872.

This little book is a capital review of the affections resting from exposure to venereal contagion. It treats of the constitutional affections and results. The various forms of pustule, vegetations, ulcers, nodes, etc., that are so vexatious to the practitioner. This little book will serve as an excellent help in all these troublesome questions. For sale by Robert Clarke & Co. $1.75.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

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Original Communications.

Art. I.—Acute Myringitis.

By A. D. WILLIAMS, M. D., St. Louis, Mo. (From advanced sheets of a work on "Diseases of the Ear," soon to appear.)

This, as is implied in the name, is *acute inflammation* of the membrana tympani. It is rather a rare, at least not common, disease; but physicians, who treat ear affections a good deal, will meet with it occasionally. All classes may have it, from the most robust to the weakest and most debilitated. Persons, whose health is somewhat below par, are perhaps most subject to it.

Traumatic Myringitis is the result of some physical injury, and is often circumscribed—confined to the injured portions of the membrane. This is not under consideration here; I speak now only of *idiopathic* myringitis, and I call it *acute* because it always develops and progresses in an acute form.

EXCITING CAUSES.—Exposure in cold, damp weather and in strong winds is the most frequent cause of myringitis; consequently, it is observed mostly in winter time. I do not remember that I ever saw a well-marked case in the hot part of summer. Cold water in the ear may cause it.—*Troeltsch* has observed it after cold bathing. Many cases are literally *spontaneous*, where no immediate causes can be discovered.

SUBJECTIVE SYMPTOMS.—Acute myringitis comes on like a flash, without any premonitions whatever. It attacks, as a rule, only one ear, and, according to my experience, always begins at night. Suddenly an individual is aroused from his sleep with pain in his ear. This grows worse instead of better, and soon gets to be severe in every sense. The patient, in a very short time, begins to think that the suffering is beyond all endurance. Sleep is out of the question as long as his acute myringitis continues. The pain soon extends to the surrounding parts; to the side of the head and sometimes to the whole head; to the face and teeth on the corresponding side, and more or less down the neck. The movements of the jaw, in chewing and swallowing, may increase it; but this is not always the case. The auricle does not become tender to the touch as in furuncles and acute otitis externa.

All this takes place usually in an incredibly short time after the first sensations of pain.

As the disease advances the hearing becomes affected, and soon the ear is either very dull of hearing or is almost totally deaf. A sense of fullness, or stuffed feeling about the ear, is often complained of. From the very commencement the patient complains of noises in the ear, which grow worse and worse, as the trouble advances, until finally, together with the feeling of fullness and pressure, they become almost distressing. These noises continue to the end and are about the last symptom to leave the patient.

Autophonia is one of the troublesome subjective symptoms. Patients say their own voices ring through their ear in a very unpleasant way, every time they speak, and they often compare it to the noise made by speaking into the end of an empty barrel. But the great and all-absorbing trouble in all cases is the pain—the *intense, fearful* suffering. Sometimes the sufferer will beg piteously for relief, if only for a short time, that he may get even a few moments of rest and ease. I think I have seen as intense suffering from acute myringitis as from any other known cause. If anybody wants to know what *pure* pain is, let him have an attack of acute inflammation in the membrane. The pain is always worse at night.

OBJECTIVE SYMPTOMS.—These are few and very characteristic. The inflammation is confined to the membrana tympani, and the consequent changes are limited to it. In the very early stage a congestion of the membrane is observable. The vessels along the malleus handle are injected; at the extremity of the manubrium radiating blood-vessels may be seen; at the outer margin of the membrane individual blood-vessels, pointing, toward its center, are often visible. The general surface of the membrane has an increased redness, but its outlines thus far are easily distinguished.

This congestive stage, however, lasts but a very short time, usually not more than a few hours. The individual blood-vessels are soon lost in the general redness and the short process; handle of malleus and cone of light are early obscured by the general swelling of the membrane. Now the surface of the membrane becomes even, and often convex externally, and presents a dull (not shiny) appearance, and has a dark-red (like venous blood) smooth flesh color. At this stage the outlines of the membrane are entirely obliterated, so that it is difficult to tell what is membrane and what is not. This is the condition (see figure 12, left out here), in which the physician will usually see acute myringitis, as it is rare that the patient will apply for relief during the very short congestive stage. The line of union between the skin and membrane is entirely obliterated. The skin around the bottom of the meatus, in close proximity to the membrane, is considerably congested; but acute myringitis shows, in general, very little disposition to extend to the surrounding parts, either external or internal. This fact is somewhat remarkable, considering the intimate anatomical relations of the membrane to the associate parts.

The membrane and external meatus, as a rule, remain dry. I have only seen one case in which there was otorrhœa, and in that it was produced, as I thought, by caustic applications that were made before I saw him (see details below).

The epithelium of the membrane, in this dry condition, may crack, in zigzag lines across its surface. I remember one case in which a line of this kind extended clear across the membrane from above downward. I first took it to be a rupture.

I have never observed any disposition to ulceration of the membrane, except in the case where the discharge occurred, and there it had been injured by caustics, but no perforation took place.

DIAGNOSIS.—The above subjective and objective symptoms render the diagnosis comparatively easy. The most reliable of these are: 1. Sudden severe pain at night, that rapidly increases; 2. The annoying ringing of the voice through the ear every time the patient speaks; and, 3. The appearance of the membrane, its swollen condition and uniform dark-red color.

Sometimes there will be a question as to whether there is inflammation of the cavity of the tympanum or not. If the ear was previously sound, and there are no symptoms of catarrhal trouble about the throat, it may be concluded, with a reasonable degree of certainty, that the tympanum is free. Still the presence of catarrh in the throat would not prove that the drum is involved; it would only make it more probable.

PROGNOSIS.—Without treatment, the disease will continue indefinitely. I remember an old lady who suffered from it for six weeks without abatement, as she said, in the least; at the end of which time, she came under my care (see below). With treatment, however, the prognosis is very favorable. The ear will rapidly recover, and the hearing will be fully restored in from ten days to three weeks.

PATHOLOGY.—The pathological condition in acute myringitis is that of acute inflammation of the membrane, as the name implies.

TREATMENT.—This, as I direct it, is simple, easy, and effectual. It has been my custom for years to treat all cases of acute myringitis with atropine in solution (3 to 5 grs. to ounce of water). This I direct to be dropped into the ear from three to five times a day. At first it may be used every hour till the pain is relieved. It should be dropped in warm, and allowed to remain in the ear from five to ten minutes. Then I let it run out, and dry the ear with a rag and leave it free, except, perhaps, where the patient must go immediately into the strong, cold wind; in that case it should be somewhat protected. I do not often think it advisable to exclude the fresh air from the ear.

As the cure progresses, the solution should be used less and less frequently. I *accidentally* prescribed the atropine in the first case in which I used it. Since that, I do not think of using anything else.

In all the cases in which I have used it, the pain has been entirely relieved in from ten to fifteen minutes and it rarely ever returns; to my knowledge it has never returned when directions have been followed.

The swelling very soon begins to subside, and the membrane rapidly regains its natural appearance; the short process, the handle of the malleus, and the cone of light reappear as the swelling disappears. The improvement in the hearing keeps pace with that of the membrane.

The noises begin to cease as soon as the physical changes in the membrane begin to subside. About the last trace of acute myringitis is seen in a congested appearance of the malleus vessels.

The recovery takes place in from ten days to three weeks. One man, who did not follow directions, was under treatment about three weeks. Some were dismissed in less than ten days.

All the cases I have seen occurred in grown persons, so that I have not met with the disease in a child.

The atropine may be used in any strength, except in children. I sometimes dust a little of the powder in. In which case, if there is no moisture in the ear, a few drops of water are necessary to dissolve it.

Under no circumstances is the *anodyne*, as well as *curative*, power of atropine so well shown as in acute myringitis. It not only relieves the intense suffering almost immediately, but it actually *cures* the disease. The atropine must have done the work in the cases to which I refer, as nothing else was used. *How* it does it I do not know. I only know and give the facts.

I wish to refer to a case or two, very briefly, illustrative of what I have said above.

CASE 1.—Mrs. B——, aged 47, not robust naturally and much reduced by the long suffering, applied, some years ago, at Cincinnati, for treatment, with the following history: Six weeks ago she was suddenly aroused from her sleep by intense pain in one of her ears. Since its commencement, she declared she had not slept a wink, and still continued to suffer as severely as at first; and begged piteously for relief from the pain, that she might get a little rest—a few hours of sleep.

Such was her story, the great burden of which was the suffering and want of rest.

Upon examination, the membrane presented the characteristic symptoms above described. Its outlines were entirely obliterated, so that it was difficult to recognize it at all. Its surface was dull (not shiny) and smooth, and seemed to be convex externally. Its color was a uniform dark-red (venous) flesh color. The dividing line between the skin and membrane was not distinguishable. The adjacent skin was somewhat congested, though not much. The ear was dry and quite deaf. Noises and autophonia were complained of.

Diagnosis.—Uncomplicated acute myringitis. I ordered atropine solution (4 grs. to ounce) to be dropped into the ear warm, every hour, till the pain ceased, then three to five times a day.

The first application relieved the pain in a "short time," to use her words, and it never returned. That night she slept well all night. The atropine was continued, but less frequently, as the ear improved. The membrane rapidly regained its natural appearance, and in less than ten days the patient was dismissed as well. The atropine must have done the work, as nothing else whatever was used in the treatment.

CASE 2.—Mr. W——, aged 35, a bar-tender, applied for treatment last Christmas, with the following history: Three days previously he was aroused from a deep sleep, in the latter part of the night, with pain in one of his ears, which grew rapidly worse. *Caustic* patent medicine was used, which "burnt like fire;" still the pain continued to grow worse rapidly. He had not slept a wink for three days, except a moment at a time, when he would hold his ear close to the hot stove. To use his own words: "I never had anything to get me down so completely and rapidly in my life as this pain." Deafness, heaviness or fullness, and noises in the ear were complained of.

The examination revealed considerable otorrhœa. When the ear was syringed, the skin bled quite freely. The membrane was somewhat covered by white epithelial stuff; in its center a superficial loss of substance could be made out, in the bottom of which pulsations were visible. Other parts of the membrane were very red and seemed to be swollen.

The patient seemed to have a fresh cold, and for that reason I suspected inflammation in the drum, but the success of the treatment would have to disprove or confirm the suspicion.

Diagnosis.—Acute myringitis, aggravated by the use of caustics, which had evidently injured the skin and membrane and had caused the discharge. As already stated, trouble in the drum was suspected, but the treatment would have to decide the doubt.

Treatment.—To begin with, I put a little atropine powder in the ear and then dropped two or three drops of water in to dissolve it, and let the whole remain in the ear about ten minutes. The pain was entirely relieved in less time than that. I prescribed atropine solution (4 grs. to ounce) with directions to use as often as necessary to keep down the pain. The patient returned in three days. He had not used the medicine, as the pain had not returned. The ear was better already, the discharge was less, and the membrane showed a disposition to heal, though pulsations in the bottom of the ulcer were still to be seen. After syringing the ear, I reapplied the atropine powder, as before, and directed the patient to use the medicine three times a day anyhow, whether he had pain or not. I did not see him for four days. New Year's night, after considerable dissipation, the pain returned in rather a mild form, but sufficient to bring the patient in next morning. Had not used the medicine; had not even had the prescription filled. The appearance of the ear did not show evidences of a relapse; the discharge was less, and the membrane seemed to be healing. I washed and treated the ear in the same way.

After this the discharge soon ceased; the membrane healed very rapidly; the ulcer soon filled up and smoothed over. The hearing improved with the membrane. At the end of three weeks the patient was so well he ceased to come. During that time there was made in all about six applications of atropine. I have no doubt but that he would have recovered in less than half that time, if he had used the medicine as directed. The atropine was the only thing used, and it must have done the work.

There could have been no trouble in the drum, else the ear would not have recovered so easily.

I am well satisfied that the ulceration of the membrane and the discharge were produced by the caustic patent medicine.

CASE 3.—Dr. E——, while attending the clinics in Cincinnati, took a severe pain in one of his ears, toward the latter part of the night. When I saw him the following day he was still suffering. The membrane was in the congestive stage of acute myringitis, The marginal and malleus vessels were much injected, and there was a diffused redness apparently in its substance. The membrane had not yet begun to swell. I diagnosed incipient acute myringitis, and prescribed the atropine solution, to be used in the usual way. The first application relieved the pain in a few minutes, and in two days the ear was well.

GENERAL REMARKS.—It will be observed in all these cases that the severe pain began at night suddenly, and only in one ear; that the pain, severe at the start, was constant, and rather disposed to increase than diminish; that it continued in all, till the treatment was begun—lasting in one case, six weeks; in another, three days; and in the third, only a few hours before treatment was commenced. They were all treated with atropine solution alone, and all recovered rapidly and completely.

These facts certainly justify the general prognosis, that, without treatment, the disease will continue indefinitely; with treatment, the relief is sudden and permanent, and the recovery rapid and complete.

The uniform and gratifying success of the atropine treatment impresses one with its certain effectiveness, which should be proof of its superiority over all other methods of treatment heretofore recommended by the authorities. It has always acted like a charm in my hands and consequently I can recommend it to others, with full confidence that it will prove to be all I claim for it in the treatment of acute myringitis.

I could refer to other cases, but I consider that the above are sufficient to illustrate the general character of the disease and to show the gratifying result of the treatment. I am well aware that my account of acute myringitis differs very materially from the descriptions of others in several respects. *Troeltsch* speaks of otorrhœa as one of the regular symptoms, and also of perforation of the membrane as of frequent occurrence, and recommends strictly antiphlogistic treatment.

Gruber speaks of otorrhœa as one of the symptoms, and says the perforation of the membrane almost always takes place. He seems to describe under the head of acute and chronic myringitis what I shall treat of under the general head of otorrhœa (see below). This treatment is also antiphlogistic.

Art. II.—Dr. Lewis A. Sayre's Treatment of Fractured Clavicle.

By F. SEYMOUR, M. D.

Among the many who have indorsed the simple, but yet effectual treatment of fracture of the clavicle, suggested by Dr. Sayre, of New York city, allow me to enroll myself. Having lately had two bad cases of fracture of the clavicle, induced by falls, and having been dissatisfied with the application of the method of our former dressing, I used in these cases the method of Dr. Sayre, and was much pleased with the application—not only with its simplicity, but the steady adaptation of the fractured parts, and the complete immobility of the parts injured, and the impossibility of displacement while the apparatus maintained its position. As probably most of your readers are acquainted with the new method, I shall not enlarge upon it, only stating that it consists merely of the adaptation of two or three strips of adhesive plaster. The only points of importance are, first, to draw the *arm of the injured side downward and backward*, until the sterno-cleido mastoid is overcome by the clavicular portion of the pectoralis major, thus pulling down the inner portion of the fractured bone to its level; secondly, to see that the loop of the first strip of plaster passed around the arm, immediately below the axilla, is sufficiently large to prevent strangulation, and to carry the end of the plaster entirely around the body, so as to effectually keep the arm in the position above described; next, to carry the elbow sufficiently forward and inward to cause it to act as a lever, the first strip of plaster acting as a fulcrum. Another strip of plaster of sufficient breadth is then to be applied to keep the elbow in the position aforesaid, which is done by commencing the adjustment of the plaster over and in front of the sound shoulder, carrying it across the back, slitting it so as to receive the olecranon process, and bringing it up along the fore-arm, pressing it close to the chest, and covering the hand, and securing it near, or rather on or over the nipple of the opposite side. This is all that is necessary, and the deformity will be found to have disappeared, and the shoulder, arm, and hand are kept perfectly immovable. I sometimes use a third narrow strip from under the wrist, over the shoulder, on the sound side, carrying the end just beyond the first strip on the back ; it anchors the first strip, if it should become dry and have a tendency to slip down. I think the thanks of the profession are due to Dr. Sayre for this improved and far superior method of dressing and treating fractured clavicle, and I am sure any surgeon who will adopt it carefully, will be so pleased at the results, that he will never relinquish it for any other plan.

Translations.

Medico-Legal Report in a Case of Simulation.

By AMBROISE TARDIEU, M. D. Translated from the French (*Annales d'Hygiene*) for the *Lancet*, by ROBT. M. DENIG, M. D., Columbus, O.

Dr. Tardieu says: By direction of legal counsel of the Mediterranean Railroad Company, I visited Mons. N——, for the purpose of giving my opinion as to his actual condition, and forming a just estimate of the extent of damage he had sustained in an accident which occurred the 6th of July, 1869, near Rognac. I received further information from sundry documents already collected by both parties, especially from certificates given by different physicians who had rendered professional services to Mons. N——; from several reports made on the subject by Dr. Seguin, senior physician to the company, residing at St. Charnes; also, from Mons. D. X——, of the faculty of medicine of Montpelier, etc.

After a careful examination of these documents, and my own personal observation of the case, I have come to an opinion, and formulate the conclusions I am about to state.

We presented ourselves at the domicile of Mons. N——, accompanied by Dr. Seguin, physician to the company, well-known to him, and explained very exactly the nature and object of our visit. Mons. N——, who showed himself quite intelligent during the entire interview, and extremely anxious about the result of the action he had instituted against the company, resisted at first every demand for an examination on our part. He wished first to

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[NOTE.—The medico-legal question of simulation is one in which didactic precepts are of the least importance; personal experience and well-reported cases, aided by tact and acute penetration, can alone avail in unraveling the many ruses and stratagems to which maligners resort. For this reason, it seems to us, the following case is one which is not wholly devoid of interest to those called upon to act under similar circumstances.

The case we are about to detail, is one in which a paralysis was simulated, resulting from a railway injury, and is very instructive in more than one point of view; but especially in that it furnishes a striking example of what can be effected by a careful and minute physiological analysis of the alleged disability.]

take the advice of his friends; he had been examined several times; the statements of the experts ought to suffice. We represented to him that he was perfectly free, but that our mission was one of truth and justice; that the last visit which had been made to him was more than five months ago; that it was a matter of much consequence to ascertain whether some important changes had not occurred since that time in his condition; that finally his persistence in refusing to allow us to examine him could not be interpreted in any other way than to his disadvantage, in giving rise to the suspicion that he had something to conceal. This last argument seemed to have the most force with him, and he finally concluded to submit to the examination, not, however, without recriminations and complaints of all kinds.

We can not refrain from mentioning the unfavorable manner in which Mons. N—— impressed us, by his constant distrust, in replying to our questions, the most simple and direct, with an embarrassment and evident hesitation, giving utterance constantly to improper remarks, which could not in the least benefit himself or render less certain the investigation in which we were engaged. One might be tempted, after these remarks, to imagine Mons. N—— as weakened by constraint and pain due to the accident from which he was suffering; that he had passed a miserable existence during that time, etc. We affirm, however, that no such condition of things existed. Mons. N—— is a young man of more than common vigor, and exhibits all the attributes of most flourishing health. We found him in bed, as it was only eleven o'clock, and he usually did not rise until after mid-day. This circumstance enabled us to proceed under very favorable conditions with our examination.

The first thing which struck us was, that N—— could assume in his bed any position he chose, and with the most entire freedom of movement. He was in a sitting posture, reading; we convinced ourselves that, in this posture, the two inferior extremities were extended parallel to each other on the horizontal plane which the bed formed, and without any difference, except that the right leg appeared a little longer than the left, owing to a slight inclination of the corresponding half of the pelvis. It was impossible, at the very first view, not to be struck with the fine development of the muscles of the inferior extremities of N——. This development being not only considerable in both members, but more marked and notably so in right side, which is the one alleged to be paralyzed. This peculiarity, more than strange, had not escaped the observation of the honorable expert from Montpelier, who had not, however, taken any particular account of it, although it is quite impossible to reconcile it with a paralyzed condition of the limb. Pursuing our examination, we found very readily traces of fracture of the pelvis, corresponding to the superior internal fold of the thigh, immediately behind the scrotum. But at the same time that we made out exactly the point where the fracture had existed, it was obvious that it had united in the most perfect manner, leaving no traces of the injury except a very slight restriction in the separation of the thighs from each other. We may remark here, *en passant*, that this is really the only inconvenience resulting to N——, in consequence of the accident. We have examined carefully the sensibilities of the inferior extremities, not that we have the slightest confidence in the proofs we may derive from the statements made by the individual of the impressions received by him at the different experiments, but precisely because the contradictions of the latter have a moral value not to be disregarded. The proof consists in pinching more or less strongly a member which is supposed to be struck with insensibility. Now nothing is more easy for a person forewarned of the fact, than to guard against any manifestation of pain or uneasiness in undergoing such a test. These experiments demonstrated to us that N—— was distrustful of his own impressions, and feared that in replying in conformity with what he felt, he might say the opposite of what was necessary. When requested to close his eyes he always hastened to open them as soon as possible. We placed him in a prone position, resting on his face and abdomen, and then pinching a point on the superior part which he could not see, we obtained no response, or he carries his hand round to ascertain if we really touched him. We tickled the soles of his feet, and perceived only that certain contractions were produced in both feet, but with no less energy in the pretended injured side. These experiments, upon which the expert had placed too much stress, have in reality a very trifling value, and prove nothing but the insincerity of N——.

We come now to the essential point in the case—that which relates to the abolition or preservation of the movements or muscular force in the right inferior extremity, of which Mons. N—— claims to have lost the entire use. We have already stated that the two members reposed upon the bed equally stretched out and parallel to each other. If we took into our hands the right leg, it could be moved in all directions—abducted and adducted; the leg could also be flexed upon the thigh, and the thigh upon the pelvis, without the least difficulty, proving beyond all contradiction that the articulators were completely free; that there were no traces of anchylosis—that is to say, of immobility, however incomplete, in this member. But furthermore, we proved also in the most positive manner that there was no contraction of the muscles which move the knee, and that, on the other hand, when the limb was maintained elevated during a certain time without affording perfect support, the muscles of the thigh commenced immediately to contract to prevent falling of its own accord. Finally, it is evident that the muscles of the entire limb in their totality have undergone no shrinking, degeneration, or atrophy, which is inevitably the result of a paralysis even incomplete, dating from a period so remote as more than two years.

But the whole case assumes a most decisive aspect when N—— is made to stand erect and walk, supported on the one side by a crutch and on the other by a cane. It must not be forgotten that the left inferior extremity is perfectly sound and vigorous, and presents this singular character in a paralysis which has been attributed to an injury sustained by the spinal cord, and which has injured *only one side*—a thing seldom or never witnessed, and to which we will have occasion again to refer. But here is the most singular feature of the case. This right limb, which easily enough completely extends and elongates itself upon the bed, which we could flex without any interruption to its movements, is demi-flexed, and so carried by N—— when he is erect. Now invariably, as every one has observed, when a poor paralytic drags an inert limb, the latter hangs, and is drawn forward only by an impulse of the whole body, moving with it, after a manner, the surface of the ground. In order that a member remained half-flexed, there must be either a permanent contraction of the muscles, anchylosis with flexion of the knee, or atrophy with diminished volume of the muscles of the entire limb. Nothing, absolutely nothing, of this kind exists in the case of N——. If he holds the limb in a flexed position, it is only by a voluntary effort, by a contraction quite obvious of the muscles of the thigh, which it is easy to see communicates a stiffness and hardness to the entire limb. Herein is found, without doubt, the explanation of the exaggerated volume in the pretended paralyzed limb, which ought, on the contrary, to be atrophied.

It is the violent exercise which the simulation of paralysis imposes upon him, and the persistent, forcible flexion of the leg, which has developed the muscle of the leg out of proportion.

When N—— is erect, supported upon his crutch, the right inferior extremity half-flexed rests, not flat, nor upon the side, but upon the end of the foot and extremity of the great toe, and this member, in place of being flaccid, is stiff, hard, and contracted. We induced him to place both feet flat whilst remaining still; he took care first to take the limb in his hands and place it in the position we indicated. He maintained himself in that position, inclining the pelvis slightly to the right side, the muscles of which were then in somewhat relaxed condition; but when requested to commence walking again, he began by drawing the supposed paralyzed limb by a movement which clearly proved the force and free play of the muscles of that member. Every claim to damages based upon this paralyzed condition, which is the principal claims by N——, may be justly set aside, as no such injury either exists at present, or has at any time existed.

As to the other symptoms which he says he has experienced, or from which he suffers, what shall we say of them? That pretended lesion of the mental faculties which the attitude and language of N—— so formally disprove, and which the expert from Montpelier himself rejected as inadmissible, can in no manner be allowed any more than nervous apoplexy. Irritation of the bladder and rectum is no longer insisted on.

Furthermore, when interrogated on the function of the generative organs, N——, who did not seem prepared for the question, replied that he had frequent erections, and found himself in the condition of one addicted to masturbation. We give his reply literally, which is surely not that of a man suffering from paralysis.

There remains a last point to be noticed, viz: the complete inaction and absolute absence of all treatment of an appropriate kind, in an injury of such alleged gravity; and especially, we may say, of the *thermal treatment*, which is properly recognized as of great service in the condition supposed to exist.

There is for us in this significant indifference, and which N—— could not justify, a fact of very great importance; for we doubt not, if not the paralysis, which never had any existence, at least the consequence of the fracture of the pelvis, would have been promptly met by a rational treatment vigorously followed, and especially the use of mineral waters, which seem to have been indicated and which were haply found in near proximity to the residence of N——.

Our mission, such as we understand it, would remain incomplete, if, however delicate the taste, we should fail to give our opinion on the report and conclusions of the physician who accidentally found himself charged with making the legal examination, which the tribune of the department found necessary. It is evident that Dr. X——, struck, as every well-informed physician ought to be, at the presence of symptoms entirely irreconcilable with one another, entirely unheard of, and which in themselves impugned the veracity of N.'s statements, not willing to admit a complete simulation, allowed himself to be drawn into an explanation, by adopting certain hypotheses, which, while not satisfying himself, had the grave inconvenience of leading him away from the true facts of the case.

He admitted a *nervous lesion* in N——, which never had any existence, nor were any symptoms present, either at this time or formerly, indicating it.

He did not take into account, as much as he ought, the region of the injury, connected with the limitation of the supposed paralysis to a single member, and the integrity of the nutritive functions in the same—an important fact; also, the preservation of the functions of the bladder, rectum, and sexual organs, excluding absolutely all lesion of the spinal cord, and as a consequence incurable paralysis. As to the supposition which Dr. X—— has made, of the nature of the affection, with which he thought N—— was suffering, in admitting a capillary hemorrhage, which would have involved at once the anterior and posterior branches of the lumbar nerves, he has allowed his imagination to usurp the place of anatomical and physiological facts of the most elementary kind. We may add that in pronouncing incurable a malady or injury so badly defined, and against which, according to his own statement, science places in our hands remedies of such great power, which have not been tried, we can not resist the conclusion the Montpelier expert is vastly too hasty in despair of the future.

As a resume of the proceeding, and from direct examination we have ourselves made, we do not hesitate to conclude:

1. That Mons. N—— has suffered from a fracture of the superior anterior portion of the pelvis.

2. That this fracture, free from complication, is at present completely and entirely healed, without any apparent deformity, and without any other consequence than a slight depression of the right of the pelvis and a trifling lameness, or little less amplitude of movement in the separation of the thighs than is natural.

3. The accident, of which he has been one of the victims, has not, nor will have, for N——, any other consequence than we have just stated.

4. Not only is his life not in danger, but his health is excellent in all respects, both in appearance and reality.

5. The paralysis of which he complains in the right leg is not real. If it ever had any existence, there is no trace of it now; and we affirm in the most formal manner that everything is simulated in this pretended paralysis, and that habit and long practice have aided him in carrying out the deception.

6. N—— ought not in any manner to be considered as suffering from an incurable malady.

7. Were his condition even such as he endeavors to make it appear, which is by no means true, it would not, on the one hand, prevent him following various occupations, nor would it fail to be relieved perfectly and promptly by the use of appropriate means, especially the hydro-thermal treatment, which N—— has not tried.

8. Nothing in his case justifies his exorbitant demands.

On the Artificial Dilatation of the Anus and Rectum, for Exploration and for Operation.

By Prof. GUSTAV SIMON. Translated from the German, by L. S. EBRIGHT, M. D., of Akron, Ohio (now in Heidelberg, Germany).

The examination of the pelvic and abdominal organs with either the half or whole hand in the rectum, which method I have taught, has proved itself in such an elegant manner that I can not forbear writing a second article, in addition to the one I read before "der Congress der Gesellschaft Deutsher Chirurgie," which is published in "Archiv für Klinische Chirurgie, B. xv." Since I held that discussion, I have proved the method* of examination further, on a greater number of patients and in different directions, and have endeavored, by anatomical study and experiments on the cadaver, to control the anatomical observations I have made upon the living.

Before going further, I have a few remarks to add to my former article, on the manner of introducing the hand, and the condition of the anus and rectum during the forcible entrance.

The position in which I place the patient is upon the back, and is indeed the lithotomy position, or what might be called the half-lithotomy position. The latter is preferable, because the anus and rectum are more approachable when the thighs are flexed upon the abdomen. The side position also may be used, with the thighs flexed upon the abdomen; yet in this position, the simultaneous palpation with the free hand is not so easily performed as in the former. For a high introduction of the hand into the abdominal cavity, it recommends itself, not only to flex the thighs upon the abdomen, but also to bend the body forward toward the abdomen, so that its cavity—the abdomen—may be shortened. The palpation is best performed bimanually; for by fixing the examined part with the free hand, which is pressed upon the external abdominal wall, the examination may be made with accuracy and certainty. The chloroform narcosis must be very deep, for then only can the sphincter muscles be overcome. Before introducing the hand, the rectum must be cleansed of all fecal matter by warm-water injections, unless the patient's bowels have been previously moved.

After this preparation the hand may be pressed into the rectum; first two fingers, and then four are introduced, and finally the thumb. The dilatation must be very gradual, as also the passage of the hand from the anus to the rectum, and must be accomplished by a rotary motion. The force which it is necessary to use to expand the integumentary edge of the anus and overcome the sphincter muscles is pretty considerable; there can, therefore, by careless introduction, be a rupturing, not only of this integumentary seam or edge, but also of the sphincter muscles. This accident is most easily avoided by a gradual entrance with a rotary motion of the hand, because in this manner the dilatation may be carried to its utmost capacity. Richly oiling the hand lightens the operation. This expansion of the anus is not, as I have already stated in my first article, in the least detrimental to the contractile properties of the same. Indeed, repeated dilatation to its maximum, does not destroy its functions. In one case I operated four times through the dilated rectum for recto-vesical fistula, until, after the fourth operation, the fistula was finally healed. After the third operation the urine, which still flowed into the rectum, could be retained for as great a length of time as formerly, although it was expanded to its utmost with the speculum for a number of hours. In many other cases, I have made four and five examinations of the rectum at different times, and in clinical cases have always had one or two of those present repeat the examination and corroborate the results. In my later examinations, as well as the earlier, the feebleness of the organ has not remained longer than twelve hours. By a careful observation of the above-given directions, as my experience has repeatedly taught me, by laying the hand together in the shape of a cone, a bloodless examination may be made with a hand measuring twenty-five centimetres in circumference.* The numerous folds of the sharp integumentary seam are seldom ruptured, and in exceptional cases only is it necessary to make an incision in the posterior raphe of the sphincter muscles.† For the introduction of a large hand this precautionary incision should be much more frequently made, but even in such cases the injury is not great, and the pain in the parts does not last longer than a day. The posterior incision is healed in perhaps twelve days, and by applying a suture, may be accomplished in less. Incontinence does not follow. The anus forms—in its greatest dilatation even, which is twenty-five centms. in circumference, and may be more—but a narrow entrance to the larger cavity of the rectum. This cavity is formed by the inferior and middle portions of the rectum, the first of which lies outside of the peritoneum, and the second is covered only on the anterior portion by the posterior wall of "Douglasii Fossa," and extends to the superior third of the rectum, *i. e.*, to the point above, where the peritoneum incloses the anterior and lateral walls of the bowel, and where it is attached to the os sacrum.* This point lies from twelve to fourteen centms. above the anus, and corresponds to the third sacral vertebra. The greatest width of the rectal cavity is at a point about six to seven centms. above the anus, and its expanding capacity from twenty-five to thirty centms. From this point to the superior extremity of the middle third, it gradually diminishes to twenty to twenty-five centms.,† and from here it rapidly lessens, until, in the middle of the upper third, it is not more than sixteen to eighteen centms. in circumference, the narrowest portion being in the sigmoid flexure. The larger and most important portion of the rectum fills the true pelvis in the greater portion of its breadth, while the upper and narrower part covers only the middle of the sacrum. If the first portion is very much expanded, either through the introduction of the hand or injection of water, it not infrequently happens that a blind sac is formed, which is abruptly terminated by a fold of the superior and narrow portion of the bowel.‡ Even injected water sometimes can not be forced from the inferior and wide portion to the superior and narrower. This opening between the two parts, rendered slit-like by the fold in the bowel, lies in the sacral excavation, at a distance of seven to eight centms. from the promontory of the sacrum, and is sometimes difficult to find. If found, the superior portion of the rectum and the first part of the sigmoid flexure may be explored, not indeed with the whole hand, but almost invariably with four fingers as far as the thumb. The caliber of the bowel at this point is too small for the entire hand, and were its introduction forced, rupture would most certainly follow; for the smallest male hand, when brought together, is from two to four centms. larger in its circumference than this portion in its greatest dilatation. In two respective experiments on the cadaver, described in my first article, the walls of the bowel were ruptured longitudinally as I forced my hand—which measures twenty-one centms.* in its largest circumference—through this part. Indeed, it often happens that not only the superior, but also the middle third, is too narrow for the introduction of the entire hand—that is, the upper part of the larger cavity of the rectum—so that but four fingers may be passed into this, while the largest portion of the hand remains in the inferior third. Here the height, to which the hand may be introduced into the abdominal cavity, depends upon the mobility of the bowel, which is not infrequently very considerable, and admits of a displacement of four to five centms. But not only the variable width in the caliber of the bowel, but also the attachments of the peritoneum to the concerned pelvic viscera fixes the limit to which the hand may be pressed forward.† The peritoneum, which covers the upper portion of the viscera of the true pelvis, forms two lateral folds, which pass off from the lateral walls of the rectum on a level with the third lumbar vertebra; and run, in the female, on the posterior wall of the cervix uteri, and, in the male, on the center of the base of the bladder, from here uniting themselves in a semicircular-like fold projecting convexly forward. The lateral folds are described in the female as ligamenta recto-uterina, and in the male as recto-visicalia, while the band of union is not named. These bands (the lateral with the uniting band) form a semicircle, and might, for conciseness, be called the ligamentum semicircularis Douglasii—that is, the two halves together. They border the entrance of Douglasii fossa—which I, with the greater number of anatomists, understand to be only a pouch of peritoneum, which forms the deepest part of either the recto-uterine or recto-vesical excavation. This sac is from four to five centms. below the semilunar ligament of Douglas, lying between the anterior wall of the rectum and posterior wall of the uterus, or the base of the bladder. The deepest portion of the same is, in the female, six to eight centms.; in the male, seven

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*For fixing positively the different points which are of importance in the examination, I have frequently used patients who were under the influence of chloroform when it was not really necessary to make the examination. I made these examinations because I was convinced that they were perfectly harmless.

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*I have frequently had physicians and students make the examination, whose hands measured twenty-five centimetres and more in circumference.

†An incision heals more rapidly than a rupture; therefore, when an unavoidable rupture is foreseen, a prophylactic incision should be made through the integumentary seam or sphincter muscle.

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*With the greater number of anatomists, I recognize three rectal portions.

†The measures given, as above remarked, are the circumference of the bowel in its greatest possible expanded condition. For taking the dimensions, the bowel was taken from the cadaver, slit open, and the ends fastened, when it was expanded laterally. In this manner it was stretched to its greatest capacity, and the measure of the width taken as the circumference. Filling the bowel with plaster of Paris is not applicable for taking these measures, for it can not be expanded to its greatest extent. By forced injections of fluids (oil and wax), it may be dilated to its maximum, although it is difficult to get the dimensions, because the bowel ruptures so easily. The dimensions differ according to the individual.

‡These folds are formed of the wall of the bowel itself. The one lying in the vicinity of the fold of the mucous membrane—the so-called sphincter tertius—has nothing to do with it.

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*In my former article I gave twenty centms.; exact measuring gives twenty-one.

†I have studied these relations, partly on anatomical preparations which Herr Geheim Hofrath Arnold kindly furnished me, and partly on the cadaver.

to nine centms.; and the ligament, twelve to fourteen centms. from the anus.

In passing the hand forward into the rectum, the relation of the parts is found to be as follows:* If, with the hand lying in the large cavity, four fingers are shoved to a greater height, the broad portion of the hand will succeed in reaching, in large rectal cavities, to the height of the ligamentum Douglasii. The ball of the hand can not be brought further into the bowel, even if it be capable of great expansion, for here the above-named ligament contracts the passage and permits the entrance of but four fingers. Were the whole hand thrust to a greater height, not only would the peritoneum be torn loose (to which fact Geheim Hofraht Arnold directed my attention), but also the vessels of the bladder and rectum would be ruptured (the A. a. Umbilicales Obliteratæ, Vesicales, Hæmorrhoidales mediæ and Uterinæ). On account of this double danger, to which must be added the above-mentioned rectal rupture, forced advancing of the hand into the higher portions of the bowel must be most carefully avoided. In these cases —which must be considered favorable for the examination, since the bowel offers no obstacle to entrance as far as the semilunar ligament of Douglas—the base of the thumb is thrust to this point, twelve to fourteen centms. above the anus, and half of the hand can advance through the upper part of the rectum into the beginning of the sigmoid flexure. Therewith the abdomen may be palpated several centms. above the umbilicus, and by reason of the great mobility of the bowel at this point, the abdominal coverings in front may be reached. Indeed, not only the left, but the right side, may be palpated at this height. In other cases, where the upper portion of the large rectal cavity—*i. e.*, the middle third, which is covered on the anterior surface of the posterior wall of Douglasii fossa—is, either in its whole extent, or partly, too narrow for the entrance of the whole hand, by the introduction of four fingers, this portion, together with the hand, may be carried upward, and passed through the space surrounded by the ligament.

Douglas' fossa is thereby inverted, and this inversion may be carried to such an extent that the semilunar ligament, which before formed the highest part of the fossa, now forms the deepest. The dislocation of the bowel, which might be carried still further after the inversion of Douglas' fossa, is here limited by the unyielding ligament. In case the mobility of the bowel be less, whereby the inversion of the fossa may be rendered incomplete, the further advance is arrested, although the ligament does not act as a barrier. These conditions, which are not infrequently found, are far less favorable for the palpation than those previously described; for, if the bowel is capable only of a partial inversion, the hand can not reach so high above the ligament; if the dislocation is carried to complete inversion, the upper portion of the bowel is rendered so tense that its mobility is diminished and the lateral palpation much impaired. Here it is often impossible to reach as high as the umbilicus with the finger, but only to the abdominal walls between the umbilicus and symphisis; or if the umbilicus is reached, it is impossible to palpate the inferior portion of the left side of the abdomen. We reach to the least height in the abdominal cavity when the superior narrow portion of the rectum—which is covered on the anterior and lateral walls with peritoneum—is comparatively narrow and rendered immovable by abnormal adhesions. It is better in such cases to avoid palpation with the fingers in this portion, and to palpate only through the blind sac-like expanding part of the bowel, the walls of which may be lifted so far above the semilunar ligament that the points of the fingers are but 2–3 centms. from the edge of the symphisis, and may be felt with those of the free hand through the abdominal walls. A sufficient height may be reached through this sac to feel very minutely the uterus and ovaries. Finally, in cases in which, on account of too great a narrowness of the inferior strait of the pelvis, the hand can not be at all introduced into the large cavity of the rectum, or where a high introduction into the abdominal cavity is unnecessary, palpation may be performed with the half-hand, and likewise through the anterior wall of the rectal blind sac.

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*I learned these relations on the cadaver, by taking the small bowels—ileum and jejunum—out of the pelvis, and shoving my hand upward through the rectum.

The progress which has been made through this new method of examination results in this—that the fingers, in favorable cases where the hand is entirely introduced, are able to reach at least 15 centms. higher in the abdominal cavity than in the old manner of examination; in less favorable cases, from 10 to 12 centms.; and by the half-hand, from 5 to 6; further, that they are separated from the parts to be examined, only by the thin wall of the bowel. The examination has this additional advantage—that the sureness of its results are not detracted from by the thick and unyielding abdominal walls, which rendered the old (the palpation through the abdominal walls) and the ordinary bimanual palpation, very uncertain, or, in many cases, completely resultless.

The indications for the examination, I have given in general in my former article. It may be practiced in all important cases of disease, in which, by the older methods, the necessary information can not be obtained. As a matter of course, the patient must be previously informed that an examination through the rectum is necessary, and that he may have pain in the parts for a few days. If an operation be in view, the examination may be made immediately before the same.

In considering the more particular conditions in which the manual rectal examination will probably have peculiar advantages over the earlier methods, we will find them before all-striking in diseases of intraperitoneal-lying organs, in reference to their position, form, and consistency. The diseases of the rectum can be recognized as high as the beginning of the sigmoid flexure, and the diagnosis of the disease of the intra-peritoneal portions of the female genital organs (uterus, ovaries, and uterine ligaments) and the bladder, particularly in males, abscesses and tumors in the pelvic cellular tissues, etc., may in every case be rendered certain, where it is possible for the method to be used. I might mention a large list of cases of disease of these parts in which it was impossible to make a correct diagnosis by the older methods of examination, while after the new it was quite satisfactory. But this method has not only marked advantages for the diagnosis of diseases of the pelvic organs and tumors which lie in the lower half of the abdominal cavity, for, from the fact that the pelvic organs may be grasped in their whole expanse, from hence evidence may be gained for the diagnosis of those tumors which lie in the abdomen, but do not stand in connection with the pelvic viscera; furthermore, one can, through direct palpation, examine enlargements and tumor formations which have their seat in the lower half of the abdomen, or which project from higher-lying viscera into this part. Cases belonging in this category, in which abdominal tumors have been diagnosed most exactly in all details of shape and position, I reported in my former article, and this list has been greatly increased.

For obstetrics our method of examination might be specially applicable, inasmuch as pelvic contractions—total as well as unilateral—in general all form-changes of the pelvic bones, can be much easier and more confidently determined than formerly; particularly may the posterior portions of the bony pelvis—the sacrum and the lower lumbar vertebræ, which are subject to the most frequent and important changes in form—be palpated with the greatest exactness; finally, the introduction of the hand might be of advantage for the surgical therapeutics of the pelvis and abdominal viscera. The technicalities of many operations might be thereby advanced, and perhaps entirely new operative procedures be rendered possible. In my earlier article I drew attention to the fact that in chloroform narcosis foreign bodies might be extracted from the rectum, and that perhaps incarcerated herniæ, particularly umbilical, can through pulling from within be freed from their incarceration. I have also mentioned a case in which I dislodged a fibroma of the uterus from its attachments which could not be moved with single fingers, and shoved it into the cavity of the abdomen, upon which I could press the myom, which sat upon the fundus of the uterus with a small pedicle, so against the inner wall of the abdominal coverings that it projected strongly. The extirpation of the same, had the indications for it been present, would have been far easier and less dangerous than the ordinary extirpation, because, after making the incision through the abdominal wall, the tumor could have been pressed out of the cavity from behind.

These communications may succeed in introducing into our practice a more methodical examination of the pelvic and abdominal viscera through the rectum. In regard to their worth, scarce a doubt can exist; and that by observing the rules of caution given, not the slightest harm can follow to the patient, I believe I have conclusively proved.

There came recently to Heidelberg, on my invitation, a large number of professors and physicians, in order to learn this method of examination. There were five female patients; two with vaginal fistulæ (among them, one with contracted pelvis), one with fibroma of the uterus; one with ovarian tumor, and one with carcinoma of the uterus. The examination was repeated on each patient at least three times; on three of the same, five times, and also by colleagues whose hands measured 25–26 centms. By observing the rules of caution, *i. e.*, with very gradual introduction of the well-oiled hand, the edge of the anus was ruptured very superficially in one instance only. After the examination, the patients suffered no inconvenience except nausea from chloroform, and, particularly, not the least pain in the abdomen. The tonicity of the bowel was so completely restored on the following day that injected water was retained.

The Late Prof. Partridge—A Reminiscence.—The death of Prof. Partridge, Professsor of Anatomy in the Royal British Academy, is announced. On the establishment of Charing-cross Hospital, or soon after, Mr. Partridge became attached to it, and was ultimately elected surgeon; here he remained until the foundation of King's College, when he became demonstrator and ultimately professor of anatomy; here he soon came into public notice, owing to his great sagacity in the detection of a gang of murderers, whose career was cut short by the apprehension of Bishop, Williams, May, and Shields. The two first named were professed "body snatchers," who had followed the business for twelve years, and had sold from 500 to 1,000 bodies. They confessed, however, to only three murders, the last being a poor little Italian boy, one Carlo Ferrari, which led to their detection, as Mr. Partridge, then demonstrator, when the body was taken to the dissecting-room at once suspected, from the general appearance, foul play, increased when one of the men volunteered an obvious falsehood in saying that it had been taken "in the regular way," meaning from a grave. Mr. Thomas, the superintendent of Bow-street Police Station, was sent for, and, to detain the suspected men until he came, Mr. Partridge produced a £50 bank note for their payment and asked for change; this they offered to go and procure, but the demonstrator preferred going himself, and, telling them to wait and read the newspapers, went out to hasten the arrival of the police. When Mr. Thomas arrived, he felt sure it was the body of a youth about whom some inquiries had been made. The men were at once arrested, and at the trial, May having turned King's evidence, Bishop and Williams were sentenced to be hanged, their bodies were given to dissection, and the skeleton of the former now stands in the museum of King's College, holding a bit of his own tanned skin, the body having been presented to Mr. Partridge by the Council of the Royal College of Surgeons, who at that time, by an act of Parliament, claimed the bodies of all persons hanged at the Old Bailey for murder, distributing them to the various anatomical schools in that metropolis.—*Medical and Surgical Reporter.*

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE.

JAS. GRAHAM, M. D., PRES'T. J. W. HADLOCK, M. D., SEC'Y.

REPORT OF CASES.—*Dr. Graham* reported a case of *gout* recently seen by himself in consultation. Patient suffered from intense pain in the bowels, and from occasional expulsive efforts. During several months prior to the attack, he had complained of severe pain in the thumb, which disappeared when the internal trouble supervened. The patient passed a normal quantity of urine; but the latter was abundant in urates, which were deposited in the vessel. Since there was no abdominal tenderness, the excessive pains and the surcharge of the urine, with urates, led the speaker to the conclusion that this was a case of misplaced gout. The patient was freely purged, and then placed upon an alkaline treatment. The urine cleared up and the patient was soon well. A few days later he was attacked by head symptoms, feeling stupid and dull. This condition gradually became worse, until he was entirely unconscious of things that occurred about him, and died on the third day of this attack. This case revealed to the mind of the speaker a somewhat similar case, in which the patient was also seized with pain, which was out of all proportion to the systematic condition. In this instance the diagnosis was unsatisfactory, until the form of the disease exploded by a regular gouty attack in the foot.

Dr. Carson desired to be informed whether any of the members of the Academy believed in the existence, in some cases, of rheumatic pneumonia, or pneumonia dependent upon a specific cause.

Dr. Graham observed that this was a question of great importance; but he himself had never met with a case in which an attack of rheumatism was co-existent with a pneumonia.

Dr. Carson had recently made an autopsy in a case of pleuro-pneumonia, co-existent with which there was a pericarditis. The patient was of rheumatic habit of body, and therefore it is plausible to conjecture that since the pleuro-pneumonia supervened subsequently to the pericarditis, the former resulted by extension of the inflammation from the latter. The speaker thought the most of these cases originate in this way.

RETAINED PLACENTA—POLYPUS.—*Dr. Graham* said that, in 1854, he was called to see a woman who had a decided uterine enlargement. The os was slightly patulous, but otherwise healthy. The patient being in general good health, she was advised to submit to no medical treatment. Several weeks ago the patient called upon the speaker on account of previous attacks of metrorrhagia, and on account of the expulsion of a large fleshy mass, which, in all probability, was a polypus, the nutrition of which was cut off by the physiological atrophy of the uterus, the patient being at the climacteric. After the removal of the polypus, the uterus retracted to its normal size, after having been enlarged for eighteen years by the polypus.

REPORT OF CASES—PARAPLEGIA.—*Dr. Bartholow* related the case of a gentleman who gradually lost the power of motion of the lower extremities. For this condition, strychnia was prescribed by a homeopathic physician, under which treatment the symptoms became more alarming. There was complete paralysis of motion, loss of sensation, also loss of sensibility to temperature in both limbs, and marked nutritive impairment of the left limb. The latter atrophied until it was only one-half the size of the right extremity. Together with the symptoms of paraplegia, the feeling of a band-like constriction of abdomen was also well marked, as well as a want of retention of urine and feces. Five years prior to this attack the patient had a chancroid, which (according to the patient) was followed by no constitutional manifestation. From these symptoms, it is reasonable to think that the central gray matter of the cord was diseased; and judging from the atrophic changes of the limb, the degenerative processes extend from the central portion to the anterior cornua. One-drachm doses of the iodide of potassium were given *ter die*, and in three days after the commencement of the treatment the patient was up and about.

Dr. Ludlow observed that he knew of cases in which these large doses of iodide of potassium were not tolerated by the patient. In some cases even four-grain doses produced an irritant eruption and a very violent coryza.

Dr. Bartholow answered that these large doses are usually well borne, a tolerance being created in the system. In one case, for which drachm doses were ordered for a specific neuralgia of the fifth nerve, an ounce was taken by mistake. This enormous amount had no ill effects, with the exception of producing slight emesia; but the neuralgia disappeared quite miraculously. In some cases of specific nature, the objective point in view is the production of the constitutional effects of the agent; and these can only be obtained from the exhibition of large doses. Iodide of potassium is well known to be a most diffusible agent, and small doses are not at all effective, while from large doses most beautiful results are achieved.

GLANDULAR AFFECTIONS.—*Dr. Holdt* observed that he has recently met with a large number of glandular affections occurring in children in whom not even the slightest suspicion of a specific history could be obtained. So he has seen glandular swellings in the groins and axillæ of young girls; and in one lad the speaker observed two suppurating buboes; the age of the latter patient precludes every idea of a specific infection.

PUERPERAL FEVER AND ERYSIPELAS.—*Dr. Reamy*, in answer to a question from the chair, observed that the epidemic of puerperal fever was subsiding. He had learned of only one case of recent occurrence, and that followed a tedious labor and forceps delivery.

Dr. Richardson had two cases of the disease during the winter, and of these the second is now convalescent. The patient had a very tedious labor from an occipito-posterior position of the fœtus. The speaker is in the habit of administering quinia to his patients immediately after delivery. In this case, notwithstanding the continued use of quinia, the patient was seized with a violent chill, followed by all the phenomena of the disease. The temperature was greatly elevated; pulse 138; the uterus tender, enlarged, and very hard, since there was only a slight involvement of the peritoneum; and, on account of an idiosyncrasy of the patient, opium was not given; quinia was freely exhibited. Under this treatment the patient did well, but suffered from an alarming relapse. From this also the patient is now perfectly convalescent.

Dr. Muscroft reported a case illustrating the analogy and communicability of the disease in question, and erysipelas. Last fall the speaker was called to treat a case of compound fracture of a phalangeal bone of the great toe. There had been considerable hemorrhage, yet with appropriate treatment the patient did well. While the wound was healing the patient's wife suffered from an abortion about the fourth month. The female was attended by another, who was, however, discharged at the first examination. The speaker found the patient depressed and anæmic from repeated hemorrhages, and from an offensive vaginal discharge, which probably was owing to the retention of a portion of the placenta. At this time the husband (occupying the same apartment and bed with his wife) was suddenly seized with a violent erysipelatous inflammation of the foot and ankle. The redness extended to the groin; the lymphatics were knotted and painful. The erysipelas took on the phlegmonous form, and numerous abscesses formed in the neighborhood of the ankle. These being opened, large quantities of pus were discharged. Notwithstanding these violent and threatening symptoms, he made an excellent recovery. The doctor thought that this was another case illustrating the relation and analogy between erysipelas and puerperal disease. He also considered it interesting to note that with the transmissibility of the diseases from one to another, erysipelas should occur in the male and puerperal fever in the female.

Dr. Richardson thought that there was a general disposition of the profession to recognize an analogy between these two diseases, and that this opinion was not based upon positive proofs. So the case in question does not prove this relation, since phlegmonous erysipelas is not an unfrequent accident in cases of severe injuries where puerperal disease could not have had no possible influence. Again, the epidemics of erysipelas and puerperal fever have prevailed independently of each other; while at other periods, as in the present season, they have raged conjointly. In like manner, many authorities desire to establish an analogy between scarlitina and diphtheria; while other equally good authorities are not willing to admit their identity of character. The speaker considers it improper to allow such doctrines to become known to the public, where they can effect no good, and create nothing but dread and confusion.

Dr. Gobrecht stated that during his residence at the Pennsylvania Hospital he had charge of a case of erysipelas in the surgical wards. During the absence of the other residents a patient was suddenly taken with violent labor-pains, which made an examination a matter of necessity. Before the obstetrician of the house could be called, the woman was delivered. A few days later she was attacked by a series of symptoms, which Prof. Hodge denominated as those of puerperal fever. Therefore the speaker thought that he had directly communicated the disease to the patient. The doctor observed that some pathologists were not fond of making autopsies of subjects dead of inflammation of the serous membranes. Dr. Henry Hartshorne, of Philadelphia, came very near losing his life from purulent infection of a wound made by a needle. A phlegmonous erysipelas attacked the entire fore-arm and arm, and so numerous and large were the abscesses that at one time the life of the patient was despaired of.

Dr. Palmer stated that within the past four weeks there had been both erysipelas and puerperal fever in the obstetrical wards of the Cincinnati Hospital. In the colored ward, where patients were mixed, since the inception of a severe case of erysipelas in a surgical case, three women had been confined, all of whom had convalesced promptly and uninterruptedly so far as the pelvic organs were concerned; but in one case there was a sharp attack in the puerperal state of facial erysipelas—the only case of erysipelas in the parturient women he had ever seen. In the white ward there have been three cases of puerperal fever, the first occurring in a primiparious woman, a week after normal delivery. Pneumonia (double) showed itself in two days after confinement, which progressed favorably, when the patient began to complain of pain in the abdomen. This became very tender and tympanitic; the tongue red, dry, pointed; the pulse, 125 and 130; temperature, 105; lochia scant, offensive; suppression of milk; vomiting, diarrhea, delirium. Treatment consisted in a disinfectant vaginal injection of carbolic acid and labarraque solution; superficial blistering of abdomen with turpentine stupes, followed by flaxseed poulticing; the internal use of quinia and opium, each grs. j every three hours, until vomiting and diarrhea came on; then the use of carb. ammonia camphor; no alcoholic stimulants, and free nourishment with milk and beef essence. The patient is now sitting up, and has entirely recovered, so far as the puerperal fever is concerned, there remaining, however, a partial consolidation of lower right lung. The second case, even more severe, was ushered in by a child, followed by fever and intense pelvic pain, thirty-eight hours after delivery, in a primipara. Tongue red and dry; pulse, 130 to 135; temperature, 105½; abdomen tympanitic; lochia scant and offensive; slight vomiting; diarrhea; no delirium; treatment essentially the same, except that five drops of tinct. verat. viride, with gtt. xxxv of bimeconate of morphia, were given every two to three hours until pain was relieved. Temperature was descended to 102, and pulse below 100. Quinine was given in decline of disease. Case is convalescent. The third case, the mildest of these, in a multipara, commenced twenty-four hours after delivery, the disease here not extending to the abdominal peritoneum, but being a puerperal endometritis and pelvic peritonitis. Treatment as above; case still in progress. The speaker stated that every precaution was taken to prevent the spreading of the disease in the wards, and it had as yet not existed as extensively as would be expected, considering its prevalence in the city and vicinity. Thorough contraction of the uterus is secured by the use of the hand, ergot, and bandage, after delivery of the placenta; the ward freely ventilated by windows; the diet full but nutritious; the vagina freely washed out daily with disinfectants in every case, whether the lochia were offensive or not.

PORTAL THROMBOSIS.—*Dr. Carson* reported the following case and post-mortem history, being given by Dr. James Brown, at the Cincinnati Hospital. James Dawson, æt. 60; single; laborer; mother died of dropsy; father dead, cause unknown; no venereal history; never was a hard drinker. States that ten years ago he had a spell of fever, and was sick at the time four months; after recovering from the fever, brown spots came out over nearly all parts of the body. Present sickness commenced one year ago; first noticed a swelling of the feet and legs. Has had a slight cough for three years, but was able to work until one year since. Five weeks ago he began to expectorate blood. The first day thinks he expectorated about one pint, and continued to expectorate for three weeks. Says that his feet and legs are much more swollen since the spitting of blood. Bowels have been quite loose for three months, and he has lost considerable flesh lately. Present condition: Man of average size; very anæmic; face and lips pallid; tongue coated with fur and cracked in the center; thermometer 99°; pulse 92, and weak; feet and legs œdematous, and pit on slight pressure; movements of chest the same on both sides; percussion the same over the upper anterior region of the lungs. Striking with the hammer just beneath the right clavicle, produces nodular elevations. Respiration higher pitched over the right apex than over the left.

Over the anterior lateral and posterior base of the right lung, crackling and mucous rales are heard; same kind of rales are heard over the base of the left lung posteriorly. Heart præcordial; dullness normal; apex beat at the nipple; systolic murmur heard most distinctly above and within nipple. This murmur not heard at the base nor outside of the nipple. Hepatic dullness 3½ inches. Some fullness of the veins over the region of the liver. Spleen somewhat increased in size. Abdomen distended and tympanitic, except in the lumbar region, where it is dull, but becomes clearer on change of position; on palpitation there is fluctuation; there is fluctuation in the lateral parts of the abdomen. Ordered quinia sulphas, gr. ij. ter die. January 14—thermometer 99°; pulse 80; appetite bad; slept very little during the night. January 15—thermometer 100°; pulse 78; slept very little and was restless all night. January 16—thermometer 99°; pulse 80; slept a few hours; don't complain of any pain. January 20—thermometer 99½; pulse 80; passed 18½ oz. urine during the night; examination urine shows presence of phosphates—S. G. 1018. January 23—abdomen enlarging very rapidly; measurement on level with the umbilicus 41 inches. January 24—thermometer 99°; pulse 80; slept very little; has dyspnœa; is not able to be out of bed; abdomen much distended, and fluctuation very distinct. January 25—died. Autopsy by Dr. N. P. Dandridge, twenty-five hours after death. Post-mortem rigidity slight; abdomen greatly extended; the integument over all parts of the body very pale; legs œdematous. Upon opening the thorax, found old adhesions over each lung, which was readily broken down. Abdomen contains 170 oz. of cloudy straw-colored fluid. Lungs crepitant throughout. On section, a large amount of frothy fluid escaped. Heart entirely collapsed. No blood contained in the cavity of the heart. Walls of left ventricle thin, and the cavity somewhat dilated. On the aortic surface of the valves, there were calcareous deposits; liver weighed 3 lbs and 3 oz. Transverse diameter, 10½ inches; anterior-posterior of right lobe, 6½ inches; of left lobe, 5½ inches; surface very uneven and paler than normal and quite soft. Portal vein contained large clot as far as the first division. A part of this clot was deposited as a firm layer on and adherent to the vein. Kidneys normal; spleen 7x6½, weight 2 lbs. Capsule at one point thickened by a white deposit; color on section bright red; consistency firmer than normal. We should state that microscopic examination of the blood showed increased number of white corpuscles, though scarcely amounting to a condition of leucocythemia. There are some statements made by this patient that, in the light of his subsequent history, must be construed differently from his own belief. The blood which he at one time is said to have expectorated, most probably came from the stomach, and was, among other things, an evidence of the portal obstruction at the time of his admission to the house; and, until within three days of his death, his case promised to me the ordinary chronic course of hepatic dropsy. He was seldom in bed; his treatment was simply tonic. It was apparent after the change, that nothing would be availing to arrest or palliate the symptoms; as the account states two or three days before his death he was found in his bed with a very rapid and unusual increase of the ascites, and with evidences of general exhaustion, from which he soon died. The thrombosis of the portal vein was sufficient to account for this rapid change. The cirrhotic condition of the liver, and its consequences, were intensified by this added obstruction. Probably it had begun days before, and was too quick for any compensation by collateral circulation. In many such cases the rapidly developed obstruction has for its effects hemorrhage from the stomach and bowels, but there was none here. The extremely anæmic condition, whether it depended upon the hepatic or splenic lesion, or both, was no doubt a condition predisposing to the rapid serous effusion, as illustrating the accidents of chronic visceral disease, and cause of death in hepatic dropsy.

KING'S COLLEGE HOSPITAL.

A CASE OF RED SOFTENING OF THE BRAIN.

For the following notes we are indebted to Mr. Francis Warner, M. B.:

The subjoined case was a well-marked example of that form of cerebral degeneration called red softening, and was probably due to the intemperate habits of the patient. The extensive disease of the vessels was no doubt primary, and either minute ruptures occurred in the capillaries, or the so-called atheromatous abscesses in the aorta discharging their contents into the blood-current, may have caused embolism in the capillaries and infarctions of the affected parts.

The patient, a married woman, aged twenty-five, was admitted on November 25th. The following history of the case was obtained from the husband by Dr. J. H. Philpot, house-physician: Both parents alive and healthy; no history of consumption in the family. She is married, and has four children, all healthy. She seems to have enjoyed good health till lately, but about a year ago she began to take to drinking hard, chiefly gin, being almost constantly in a "muddled condition." The present illness commenced about three months ago with anorexia, retching, and vomiting; at the same time a "scaly rash" appeared upon the skin, then blebs formed, burst, and scabbed over. She gradually got worse, and began to be changeable in temper and fretful; would lie about in a listless manner, and was very irritable when disturbed. Her memory became impaired, and she was constantly affected by spectral illusions. These mental symptoms became very marked about two months ago. For the last three weeks she has been almost confined to bed, gradually losing power in her limbs, and since the 10th inst., she is said to have been quite powerless. The bowels have not been open for a fortnight, except once slightly. During the last week she has complained much of headache and pains in the limbs. For the last three days she has been more or less unconscious; lying with her eyes closed and refusing to take food, but drinking eagerly. She has never been violently delirious, but on one or two occasions has tried to get out of bed.

On admission to the hospital, the following notes were taken: Patient is a stoutly-built woman, apparently beginning to emaciate. She lies in bed on her back, generally almost motionless, sometimes a little restless, especially when being examined. Face flushed, skin moist, but no sweating. Head turned away from the light, eyes closed. She resist attempts to raise the eyelids, but when this is done, the eyes are seen to be injected and watery; pupils contracted, but equal; they act sluggishly to light. There is well-marked divergent strabismus, varying in amount from one minute to another. Ophthalmoscopic examination found impracticable, A careful examination of the heart and lungs shows no signs of disease. There are some sores on the legs and back; there is very little ulceration, if any, and some of the sores have become crusted over; they much resemble rupia. There are also some old cicatrices on the skin of the abdomen. A slight "tache cerebrale" may be developed by drawing a blunt point gently over the chest or forehead, but it is not well marked. Breathing is noisy and stertorous, respirations sixteen to the minute. Pulse small and slightly irregular, 130. Tongue furred, dry at tip and center; no sordes on the teeth. There is much difficulty in getting patient to swallow any food. Urine clouded and loaded with lithates, acid, specific gravity 1020; no albumen. Thirty-two ounces were drawn off with the catheter. Temperature 98° F. Was ordered an enema to relieve the bowels, and four grains of calomel to be placed on the tongue.

Nov. 27th. The patient is almost unconscious, and can not be made to speak. She attempts to protrude the tongue when repeatedly told to do so. The divergent strabismus is more marked, and continues to vary from time to time. She occasionally utters a few incoherent words. The breathing is more stertorous, and she is evidently sinking. Pulse 138; temperature 100° Fahr. Died quietly at night.

Autopsy, made by Dr. Kelly, twenty-four hours after death.—The brain-membranes and superficial portions of the brain were healthy. The arteries at the base were atheromatous but pervious. On opening the ventricles a large cyst of the choroid was found on each side. Beneath the lining of the ventricle, and seen through it, were small patches of red softening placed symmetrically in each corpus striatum and optic thalamus. They were close to the surface, each about the size of a pea. A similar patch was found on the medulla oblongata, near the floor of the fourth ventricle. Microscopical examination showed the capillaries of the diseased portions to be extremely varicose; weight of brain, 46 oz. Heart flabby; valves healthy; weight, 11½ oz. Aorta atheromatous. Kidneys lobulated, capsule adherent, cortex diminished; weight of the right kidney, 6½ oz.; of the left, 5¾. Liver large, smooth, and fatty; weight, 75 oz.—*London Lancet.*

ST. THOMAS' HOSPITAL.

CARCINOMA ŒSOPHAGI—GASTROTOMY—DEATH.

The success which has attended the operation of gastrotomy for physiological purposes or for the removal of foreign bodies from the stomach, naturally suggested the attempt to make a new way into the stomach when from any cause the œsophagus has been permanently and narrowly strictured. But, unfortunately, so far there have occurred no cases in which the operation under these circumstances has been really successful, although in some cases the patient has survived many days, and the symptoms have been much relieved. In malignant disease of the œsophagus this operation appears justifiable; if successful, it would not only rid the patient of much distress, but would allow of the free administration of nutriment.

The following case, for the notes of which we are indebted to Mr. William Garton, house-surgeon, is the third case of gastrotomy performed at St. Thomas' Hospital within a few months. The other two cases are recorded by Mr. MacCormac in the last volume of the Clinical Society's Transactions, one of the cases having been operated on by that gentleman, and the other by Mr. Le Gros Clark.

Thomas R——, aged fifty-eight, a porter, was admitted July 26, 1872. Patient noticed difficulty in swallowing solid food in March last. Since May no solid food had been retained, and for eight days before admission no liquids. The patient was extremely emaciated, and had some tenderness about the thyroid cartilage, but no thickening could be detected at this part. A No. 12 bougie was passed apparently into the stomach, and after that a large prostatic catheter, through which liquid nutriment was injected, but which was not retained. The length of bougie passed was fifteen inches, measured from the mouth.

July 27th. Gastrotomy was determined on, and, on chloroform being administered, Mr. Mason made an incision three and a half inches in length, immediately below and parallel with the costal arch on the left side. The stomach was easily reached and secured with tongue forceps, and, after being fastened by means of sutures to the edges of the wound, was opened. No hemorrhage occurred, nor was there any escape of the contents into the peritoneal cavity. Patient to be fed through the opening every half hour with beef-tea and brandy. An hour after the operation the patient felt comfortable; pulse stronger; no nausea. Four hours afterward the patient was progressing satisfactorily. Nutriment retained. To have a hypoderic injection of one-third of a grain of morphia.

July 28th. Passed a quiet night. 3:45 P. M.: Pain in the abdomen. Face pale, extremities cold, pulse quick and feeble. 5:50: Patient died.

Autopsy.—A mass of cancerous growth, almost encircling the œsophagus, was found about one inch and a half above the cardiac entrance of the stomach, normal mucous membrane intervening between this and the growth. A similar mass, about the size of the fist, involved the head of the pancreas, and pressed mechanically on the lower end of the œsophagus and on the cardiac end of the stomach. Other organs quite healthy. No peritonitis.—*London Lancet.*

MEDICAL ASSOCIATION.

The Mahaska County (Iowa) Medical Association met at the office of Dr. Gruwell, and was called to order by the president. Present: Drs. Gruwell, Huntsman, Coolidge, Page, Hurst, W. E. Chamberlin, L. Smith, Butler, and W. L. Chamberlin. The minutes of the previous meeting were read and approved. Dr. Gruwell read a well-written and appropriate address, in which he gave a brief history of the medical profession, and dwelt at some length on the duties and obligations of medical men. Dr. Page gave a brief account of some recent cases of cerebro-spinal meningitis, which had occurred in his locality. The question as to the proper mode of treating this terrible disease called forth quite an interesting discussion, which was participated in by all the members present.

Drs. D. A. Hurst and Lucian Smith were elected delegates to the State Medical Society, which meets at Marshalltown in June. Dr. Hurst was elected as a delegate to the American Medical Association, which meets at St. Louis, on the 6th of May next.

The following officers were elected for ensuing year: President, Dr. J. P. Gruwell; vice-president, Dr. Lucian Smith; secretary, Dr. W. L. Chamberlin; treasurer, Dr. Wm. Butler; censors, Drs.

W. E. Chamberlin, Huntsman, and Page. Dr. Hurst, on leaving the chair, made some appropriate remarks.

On motion of Dr. Huntsman, the thanks of the association were tendered to the retiring president for the able and efficient manner in which he had discharged the duties of his office.

A resolution was passed unanimously inviting the Des Moines Valley Medical Association to hold its next annual meeting at Oskaloosa.

On motion the association adjourned to meet on the first Tuesday of July next.

W. E. CHAMBERLIN, *Secretary.*

OSKALOOSA, *April* 1, 1873.

Prof. Knox and Text-books on Anatomy.—*Every Saturday* quotes the following from *All the Year Round:*

Perhaps the most eminent teacher of anatomy in Edinburgh, or in Britain, early in this century, was Dr. Robert Knox. He was a man abounding in anything but the milk of human kindness toward his professional brethren, and if people had cared in those days to go to law about libels, it is to be feared Knox would have been rarely out of a court of law. Personality and satirical allusions were ever at his tongue's end. After attracting immense classes, his career came very suddenly to a close. I need scarcely refer to the atrocious murders which two miscreants, named Burke and Hare, carried on for some time to supply the dissecting-rooms with "subjects." They were finally discovered, and one of them executed, the other turning king's evidence. Knox's name got mixed up with the case, being supposed to be privy to these murders, though many considered him innocent. The populace, however, were of a different opinion. Knox's house was mobbed, and though he braved it out, he never afterward succeeded in regaining popular esteem. He was a splendid lecturer, and a man who, amid all his self-conceit and malice, could occasionally say a bitingly witty thing. It is usual with lecturers at their opening lecture to recommend text-books, and accordingly Knox would commence something as follows: "Gentlemen, there are no text-books I can recommend. I wrote one myself, but it is poor stuff. I can't recommend it. The man who knows most about a subject writes worst on it. If you want a good text-book on any subject, recommend me to the man who knows nothing earthly about the subject. (That was the reason that Dr. T. was asked to write the article, 'Physical Geography,' for the 'Encyclopædia Britannica.') The result is that we have no good text-book on anatomy. We will have soon, however; Professor Monro is going to write one." That was the finale, and, of course, brought down the house, when, with a sinister expression of his face, partly due to long sarcasm and partly to the loss of an eye, he would bow himself out of the lecture-room.—*Medical and Surgical Reporter.*

Correspondence.

HOSPITAL ALLGEMEINES KRANKENHOUS,
VIENNA, *April* 4, 1873.

EDITOR LANCET: The lectures and clinics in the hospital have been closed for the Easter holidays, and are not to be resumed again until about the latter part of this month. A large number of the students, who were non-residents of Vienna, have already departed for their different homes, and the courts of the hospital are already beginning to look somewhat deserted. Many of the *private courses* by the assistants are still in operation; but as their most remunerative patrons are recruited from the ranks of the foreign students, they do not seem to thrive at present, from the fact that the percentage of the foreign element has not been as large as on former occasions; besides, the number of students in general was less this past semester.

These courses, which form quite a feature of the Vienna school, are generally given by the assistant physicians in the various clinical divisions of the hospital. They are calculated to give a practical *resume* of the different branches of medicine, surgery, obstetrics, etc., taught by the professor who presides over the department to which they respectively belong. They last from *four* to *six* weeks, at the end of which time new ones are formed, providing the requisite number of students subscribe. They offer an advantage in containing a limited number of students; besides, they are advantageous to those who come late in the season, or who do not wish to remain long enough to have the benefit of the regular course of lectures.

I notice, however, that many of the gentlemen who give these *courses* have taken advantage of the liberal manner in which foreigners have patronized them; namely, by charging them about one-half more than the "natives of the soil." On seeing a notice of one of these courses, in which the fee read, "Natives, *ten florins;* foreigners, *fifteen;*" my curiosity was excited to know the cause of the same, and on "interviewing" the gentleman in regard to the matter, the only excuse he could give was, that it was customary, and that the Austrian students were obliged to take the course, while the foreigners were not! Rokitansky, Jr., gives a course on gynecology, in which he charges Austrians *twenty* florins and foreigners *thirty*.

Prof. Stricker closed a little earlier in the season than the other professors. During the semester he performed a number of very interesting experiments for the purpose of ascertaining the temperature of the blood in the right and left sides of the heart, as well as that of the walls of the heart itself. In one series of experiments, which were performed upon a large dog, the animal was at first *curarized*, and as the respiratory muscles were paralyzed by this procedure, artificial respiration was practiced by means of a bellows-shaped instrument which the professor has invented. A thermometer was next introduced into the *vena jug. sup. dextra*, as far as the right ventricle, after which the thorax was opened and a lobe of the lung raised, in order to introduce a second thermometer into the pulmonary artery. By means of various measurements, a satisfactory description of which would prove difficult, he obtained the following results:

When the vena cava ascendens is ligatured, the blood in the *pulmonary artery* is nevertheless warmer than that in the *cava descendens*.

Now, we know from the researches of Cl. Bernard, that the blood which is carried by the cava descendens is colder than that conveyed by the cava ascendens; and as the blood proceeding from both becomes mixed in the right side of the heart, it is easy to understand that this mixed blood proceeding from the right side of the heart into the pulmonary artery should contain a higher degree of temperature than that proceeding from the cava descendens; so that the result itself would contain nothing new, were it not for the presence of the ligature in the cava ascendens shutting off the supply from that vessel. This gain in temperature by the blood in the pulmonary artery is, according to the opinion of the experimenter, derived from the substance of the heart through the medium of the coronary veins, which collect the blood from the walls of the heart, and empty the same into the right auricle, where it becomes mixed with the blood from the cava descendens and ascendens. He also demonstrated that the left walls of the ventricle constitute the warmest part of the heart; also, that the blood is cooled in passing from the pulmonary arteries through the lungs.

The summary, therefore, shows that the blood in the right ventricle is warmer than that in the left ventricle, although the walls of the latter are warmer than those of the former. This increase of temperature in the substance of the left ventricle is accounted for by the experimenter according to the mechanical theories of the generation of artificial heat; the greater amount of labor it performs over that of the right ventricle.

Judging from the high price of rooms and living in Vienna, in consequence of the Exposition, the prospects for the summer semester are not very brilliant, as far as the number of students is concerned.

Prof. Rokitansky has been unwell the greater part of the winter, and only lectured about two months during the whole semester. Judging from his appearance, I should come to the conclusion that his lecturing days were about over, for his health seems to be declining steadily. He still visits the post-mortem hall when anything interesting is on hand.

Prof. Hyrtle is said to have expressed his intention of resigning at the close of the Exposition. His anatomical preparations for the same are already on exhibition, and are remarkably fine.

I never saw a more *mixed* class of students than those who attend his lectures. There seems to be representatives among them from almost all quarters of the globe—*civilized* and *uncivilized.* Many of them wear their hats during the lecture, and some even smoke.

There has been a considerable amount of puerperal fever in the lying-in wards during the past winter.

The Exposition is to be opened on the 1st of May, with the usual ceremony on such occasions. I shall endeavor to obtain a glance of the same before my departure.

With much respect, from your friend,
FRANCIS DOWLING.

Professor Tyndall, during his recent scientific lecturing tour in the United States, delivered in all thirty-five lectures, at which his receipts aggregated $23,100. After paying expenses, a fund of over $13,000 remained; and this, before leaving for Europe, he placed in the hands of a committee, who are authorized "to expend the interest in aid of students who devote themselves to original research." The committee are Professor Joseph Henry, of the Smithsonian Institute; Professor E. L. Youmans, of Yale College; and General Hector Tyndale, of Philadelphia.

Selections.

Fatal Vaccination. By L. B. Anderson, M. D., of Virginia.—At a country store in the county of Hanover, Virginia, a goodly number of persons assembled on Saturday, the 15th of February, 1873, to be vaccinated by a country merchant. Several submitted to the operation, only two of whom were impressed by the matter used. One of these was Mr. H., a gentleman fifty years of age, somewhat addicted to the immoderate use of spirituous drinks, but otherwise of good health and constitution. The virus was taken directly from the arm of a child some nine days after vaccination. The first crust had been forcibly removed before its maturity, and another had formed, under the edges of which there was a free discharge of pus. A puncture was made with the point of a lancet at the lower line of the upper third of the arm, the scab raised from the arm of the child, and the "matter" secured and introduced in the puncture. Mr. H. felt no uneasiness, or any effect, from the operation until the next morning, when, on waking, he complained of headache, nausea, and chilliness. He ate something and soon vomited freely. In the meantime the arm began to inflame and swell, both passing toward the hand. The pain was so intense during Sunday night he was unable to sleep. The pain, swelling, and redness rapidly increased, accompanied with a burning fever, during Monday. Learning on Tuesday that "lead-water" was being used in a similar case, he applied it freely during the forenoon, with no relief of pain, however, or abatement of the symptoms. Dr. F. was summoned to see him, but being too unwell to visit him, he directed applications of "warm water and vinegar" to the arm. This was continued, with no abatement of the symptoms, until Dr. S. directed the arm to be painted with tr. iodine, a large dose of calomel to be taken, and twenty drops mur. tr. iron to be given three times a day. The iodine was applied freely, soon after which the writer saw him.

At two o'clock P. M. Thursday, the fifth day after the operation was performed, the pulse was frequent, but neither feeble or strong; the flesh was warm, but not very hot; the countenance was expressive of anxiety; the stomach and bowels quiet; the kidneys acting well; the breathing nearly natural; the tongue a little coated; the left arm very much swollen, abraded, and painful; the hand and fingers also greatly tumefied and painful. There was a free discharge of a yellowish, oily, acrid fluid from the abrasions. The appearance was very unhealthy in its whole extent. Even the abraded spots, comprising one-fourth of the surface, where no iodine was applied, presented a livid, indolent, shreddy, spongy appearance.

Chlorate of potass. in five-grain doses every two or three hours—thickened milk poultices, covered with camphorated oil and laudanum, to be applied every four hours to the arm—constituted the treatment directed. He remained quiet under this treatment until Friday morning, when he became occasionally delirious. At twelve o'clock he was bathed in a profuse perspiration. At nine o'clock P. M. he expired. I saw him only once, and can give no description of the changes which occurred on the sixth and last day. I infer that the absorption of morbific matters into the circulation, and their depressing effects upon the nervous centers, and disorganizing influence on the blood, produced death.

Mr. A., thirty years of age, spare, delicate, and of a nervous temperament, was "*vaccinated*" on the same day, by the same person and with the same matter that Mr. H. was. He was taken in the same way on the following morning, and at ten o'clock A. M. had a chill which lasted nearly two hours, followed by a very active fever, and extensive and painful inflammation of the arm. Ten grains of calomel were given that night, and a saline aperient the next morning, which operated well; after which, a thickened milk poultice, saturated with the water of the acetate of lead, was applied to the whole arm, and chlorate of potass. in five-grain doses was given every three hours internally. Diet to be buttermilk chiefly, and if the fever passed off, to give sixteen grains quinine during the following day. On Tuesday, the inflammation had subsided near the puncture, but increased considerably below, near and below the elbow. On Wednesday he was much better, the fever having passed off, and the inflammation having become more circumscribed. On the evenings of Thursday and Friday he had a slight rise of fever. Quinine was given him on Saturday, and the other agents recommended were to be continued. On Saturday, the inflammation was confined almost entirely to the elbow and the parts immediately below. The former treatment was continued, with the addition of sixteen grains quinine to be given in forenoon. There was less tumefaction, redness, and pain in the arm, though the pulse was unsteady, the countenance indicating excitement, and there were flying neuralgic pains about the head and face, with considerable nervous impressibility. The quinine, chlo. potass., lead-water, and poultices were continued, with an occasional aperient of castor oil and spirits turpentine, mild and nourishing diet, until the patient was relieved.—*Southern Medical Record.*

Sulphites in Tonsilitis.—Dr. Thomas A. Elder thus speaks of their use in the *Chicago Medical Journal:*

"I have not met with a single case which the sulphites, administered in sufficiently large and often repeated doses, would not promptly relieve and cure. The doses which I use are those recommended by Dr. Tyrrell, gr. xx to xxx, repeated every hour, for an adult, and correspondingly large doses for children. The fever is generally dissipated in twelve hours—rarely continues twenty-four. The soreness of throat, headache, etc., are generally as promptly relieved, and forty-eight hours are sufficient for a cure In children, when saturated, they have produced sweating, and the peculiar cadaveric hue of sulphurous acid fumes.

"When the disease has progressed to the stage of exudation—when the shoe-peg points begin to appear, or later—I have never met with a case which I thought was benefited by the sulphites. I am then accustomed to rely upon a prescription of Prof. Miller, for diphtheria, which has almost invariably given prompt and permanent relief:

"'℞. Morphia muriat., gr. ij; acid. muriat., dil., tr. ferri chloridi, āā ʒij; syrupi, ℥ss; aquæ distillat., ℥ij. M. Sig. Dose, a teaspoonful three or four times a day, after water.'"

He also highly recommends bisulphite of soda in scarlatina.—*Michigan University Medical Journal.*

An Old Remedy in a New Role.—I wish to call the attention of the profession to an old remedy in a new *role.* For one year I have been using poultices, made in a decoction of the leaves of digitalis, to all swellings or enlargements where there was any prospect of the formation of an abscess or the secretion of pus. It has succeeded better than anything used, where an abscess was threatened in the breasts of nursing women.

I could give the history of a number of classes, but will forbear, desiring to be as brief as possible, to be understood.

For an ordinary-sized poultice: ℞. Fol. digital., ʒjss; aqua bul., ℥xviii. Boil briskly thirty minutes, and stir in Indian meal, or, what is better, ground flax-seed, to a proper consistence. Apply warm. Repeat as often as it becomes dry and the cause for using exists.—A. G. SMYTHE, M. D., *near Gun Town, Mississippi, March* 10, 1873.

Black Cohosh.—A writer on this article says: "I have repeatedly seen it used as a substitute for the ergot, and in every case with the most happy effect. It has the desired properties as a partus accelerator, without the power of doing injury to the fetus, as sometimes does the ergot. Also, it does not diminish the susceptibility of the uterus to succeeding doses of the medicine, as is the fact when the ergot is given. In simple, large, and full doses, it produces convulsive contractions of the muscles of involuntary motion, and first of the uterus. Thus it is narcotic, and ecbolic because of its peculiar narcotic operation. When given in inordinate quantities, it will produce convulsive action of the heart, and painful palpitations. Besides being narcotic, it operates in a peculiar manner on the glandular system. Thus it increases or diminishes the secretion from the liver, when its secretions are morbidly diminished or increased. It removes topical inflammations of the atonic kind, without any evacuation. It affects the bronchial mucous membrane, diminishing morbidly increased expectoration. Diaphoresis and diuresis often follow the use of the article. It has an action on the cutaneous surface, differing from a diaphoretic, producing resolution of the diseases peculiar to the part. It is emenagogue. It removes pain of the neuralgic kind, thus being a valuable medicine in colic. On some patients it has a cathartic operation, though this is but rarely noticed.

"For the removal of rheumatism, whether acute or chronic, it is the Samson of the materia medica. The gates of Gaza, posts and all, are sure to start, if it be properly given. It is necessary, in order that the medicine may operate as we wish in this or any disease, that the strength of action in the circulating system be as much as possible short of phlogistic diathesis, and any reduction below this point by bleeding or purging will be injurious. It should be given every hour, and continued until some symptoms of ultimate narcosis appear—then hold on for a few hours and resume again, if necessary.

"In ophthalmitis conjunctiva, its effects will be as distinctly seen as in any disease. A short time since, I was called to administer to a maiden lady suffering with this affection. The prescription was tincture actæ racemosa, one drachm every hour. As some topical application was, of course, expected, and none being prescribed, the gentleman of the house sportingly inquired why I did not extract a tooth to cure the eyes? In a few hours the intolerance to light was mostly removed, and the second ounce of the medicine completely cured the disease. In other cases it has had the same immediate and happy effect, no other medicine being given. It is said that it has been given to gravid females for the removal of cough, with the effect of producing speedy abortion.

"The best possible manner of giving it is in the form of tincture, which should be made with four ounces of the root, finely powdered, to one pint of undiluted alcohol. If the alcohol be diluted, the value of the tincture will be much deteriorated. The watery infusion is of no account. Given in fine powder it is not inert, but it is not the best preparation. Alcohol seems to be its proper menstruum, and the stronger the alcohol the better."—*Eclectic Medical Journal.*

Pruritus Vulvæ.—The first case I show you to-day, gentlemen, is that of Mrs. A——, æt. 40, married, but never been pregnant. During the last summer she says that she had a severe itching about the private parts which annoyed her very much indeed. During the last two months it has increased very much, and for a week past she has felt it worse than ever. This woman has pruritus vulvæ, and she is very much annoyed at the present time—so much so that she has come to us for relief. You may wonder what the special interest of this subject is. In practice you will find that it is one of the most annoying diseases you will meet with, both for the patient and physician. The first thing I must say is, never look upon pruritus vulvæ as a disease, but endeavor to find out what the cause is that produces it. Your course should always be to ask yourself the question, what is the condition which produces the pruritus? In other words, seek the root of the evil. This case beautifully illustrates the position I have taken, as you will see in the progress of the clinic.

Some three or four years ago, a patient appeared in this clinic, who presented but one solitary symptom, and that symptom was pruritus vulvæ. That woman looked haggard, wild, very much emaciated, and had the appearance of a woman suffering from delirium tremens. She had been so excessively annoyed by her trouble, suffered from such loss of sleep, that she was obliged to use opium in enormous quantities to allay her sufferings, and this in turn had made a complete wreck of her nervous system. Among the causes which may produce the disease, one was found in her case, which I will mention in connection with this. The woman was suffering from diabetes mellitus. The saccharine fluid pouring over the parts was the cause of the irritation. There was the cause of the pruritus vulvæ in her case, and it is not an infrequent cause of the trouble. That case also illustrates the importance of looking most carefully for the cause. In the first place, *pruritus vulvæ* very rarely exists as a nervous disease. In some works upon gynecology you will find it laid down that it is due to an irritation of the extremities of the nerves distributed to the vulvæ. I am not prepared to deny the statement, but I am prepared to make the counter-statement that I have never seen such a case of nervous irritation alone. I feel that I can not be too particular in impressing upon you the importance of looking as deeply as possible into the subject of etiology in connection with these cases.

You might recommend some ointment or wash, or stereotyped prescription from some work upon diseases of women; but it would be a very superficial manner of dealing with the case. The only true method of management is to first seek the cause. I believe that pruritus vulvæ is usually excited by the presence of some ichorous discharge in the lower part of the vagina, and this discharge so excoriates the vulvæ, and sets up such an itching, that the patient may do a great deal of damage to herself in a short time by scratching. In a great majority of cases, I repeat, it is dependent upon an ichorous discharge in the vagina, and hence a leucorrheal discharge may be, and is, a very frequent cause. But it is not the only cause. It is very often found to occur from cervical endometritis, in consequence of the ichorous discharge which comes from the cervical canal and pours out over the parts. Very often it depends upon some abnormal growth in the vagina, which creates a discharge that flows directly over the vulvæ and keeps up the irritation and itching.

The very desire to scratch makes the disease worse, and when the scratching has gone on for a short time, an eruption will be found which will make the case still worse, and still more sensitive to the exciting cause.

The pediculus pubis is another cause, and, upon close examination, perhaps a little pediculus may be found at the root of each hair. Remove one of the parasites, and you will have the whole case in your hand at once; but it would be quite wrong to call it a case of pruritus vulvæ simply. Nor should mercurial ointment be recorded as one of the remedies for pruritus vulvæ because it cures the disease under such circumstances. It cures when pediculi are the cause, but it would not cure the case we have before us now, nor a case dependent upon an ichorous discharge pouring over the vulvæ.

The main thing I wish to have understood, is that before you institute a plan of treatment for pruritus vulvæ, you are to look carefully for the cause, or the condition which produces it. Do not look into some work upon gynecology, and get some pet prescription, imagining that you are dealing with the case in a rational manner. But carefully study the etiology of every case. Acting upon this principle, I find in this case that the vulva is bathed with a thick and ichorous-looking mucus. It is that kind of mucus which comes from the vagina in a low grade of inflammation.

The result of physical examination in this case is the following: A pedunculated polypus about an inch in diameter is found directly in the mouth of the uterus. This has given rise to an ichorous leucorrhea, which is the general cause of the pruritus; but it is the polypus that keeps up this ichorous discharge by its irritation of the vagina, and this is the source of both the pruritus vulvæ and the ichorous leucorrhea. But, you may ask, why does this ichorous leucorrhea produce pruritus in this woman, and not in others? I will answer the question in this way: that a majority of women have pruritus who have leucorrhea, but they will almost never make this statement to the physician unless their attention is particularly drawn to it by his questions.

The patient was then placed upon her back, and the polypus removed by simply twisting it off with the forceps.

This polypus is what is called the glandular polypus, and contains a honey-like material which consists of the secretion of the Nabothian follicles. One of the little glands or follicles in the cervical canal begins to grow, is filled with a honey-like material, becomes a large cyst, hangs down into the vagina, and becomes a polypus. Without doubt this removal of the polypus will cure the pruritus vulvæ; but if you are particular about removing it rapidly, some wash may be used for the vagina, and some external applications made.—*From Dr. T. G. Thomas' Clinics.*

The Washington Capital has been allowing much space in its columns for arguments *pro* and *con* as to the efficacy of vaccination, the controversy arising from its editorial assertion that "the notion that the small-pox may be extinguished by the process of vaccination, or cured by medicine, is as unsound, philosophically, as it is untrue in point of fact." In the same issue it gave place to a communication, under the title "Vaccination a Delusion," beginning with the statement that "the appalling fact, that of the whole number of deaths in Philadelphia last year, one in eight was from small-pox, is not favorable to the claim that vaccination prevents the spread of disease, for doubtless nearly every victim had been vaccinated." The writer should have been candid enough to state these facts: that persistent neglect of vaccination in Philadelphia led to the epidemic which caused this frightful mortality; that its ravages were only checked by thorough vaccination and re-vaccination; that out of 1,574 deaths in the first five weeks of this year, the table of causes of which is now before us, only *three* were from small-pox; and that this proportion may be maintained or increased as protective measures are more or less faithfully and rigorously enforced. Meanwhile, the readers of the *Capital* should be permitted to see the following propositions, five of a series framed by the *Boston Medical and Surgical Journal* [January 16], and by it "offered as matters of belief, and some of them" [those here given] "as matters of record:" 1. Without vaccination one death in ten would be the result of small-pox. 2. Without vaccination nineteen out of twenty [of the population] would have small-pox. 3. Without vaccination sixty-seven per cent. of the cases of small-pox would be fatal. 4. With vaccination not two per cent. of the inhabitants would take small-pox. 5. With vaccination the percentage of deaths from small-pox is only about eight of the two per cent. who will take it.

Pharmaceutical.

CINCINNATI COLLEGE OF PHARMACY.

J. F. JUDGE, E. S. WAYNE, F. L. EATON,
Editing Committee.

The Cincinnati College of Pharmacy holds its regular monthly meetings, for the transaction of business and the discussion of matters of pharmaceutical interest, on the second Tuesday in each month, at 3 o'clock, P. M.

At the meeting, April 8th, afterward the usual current business had been attended to, Prof. E. S. Wayne presented to the cabinet of the College the following specimens: Fruits of the Ecablium officinarum (preserved in spirit) from Surrey, England; two large specimens of scammony root; taraxicum root, a very superior specimen of the drug, dried by the Alden process—by passing a current of warm air over the cut root until fully dried; some very large and perfect crystals of iodine; fixed oil obtained from peach-kernels, bland and sweet, not to be distinguished from oil of almonds. Some remarks were made upon the same, as being the result of an experiment to ascertain whether peach-kernels would be a profitable source for obtaining essential oil of almonds. The marc, after expression, was macerated with water, and then distilled. Twenty-five pounds of the kernels yielded only one and a half drachms of oil, having all the properties of essential oil almonds, but yield too small to make peach-kernels a profitable source of obtaining it. Specimens of methyl. alcohol. Several specimens were also presented by Prof. Wayne of fluid extracts prepared according to the new Pharmacopœia—ipecac. rhei. gossypium and cinchona—which brought forth some discussion as to the general use of glycerine in the preparations of fluid extracts in the new Pharmacopœia. The general opinion was that the use of it had been carried too far, and an expensive addition to many without any material benefit. Preference was given to the old process for ipecac, ergot, etc., and that the use of glycerine in such that contained abundantly tannin, such as the cinchonas, etc., highly useful in preventing precipitation and change. Some discussion was also entered into upon the preparation of oleate of mercury. Prof. Wayne observed that the reduction of the oxide of mercury to metal by the oleic acid in the preparation of it, did not occur when oleic acid, made by saponification, was used, and that most of the oleic acid in commerce was made by distillation, and always contained more or less of hydrocarbons, which acted as a reducing agent upon the oxide. Both kinds of the oleic acid are met with in commerce. A specimen of mercuric plaster was also exhibited by Prof. Wayne, made by decomposing soda soap by mercuric chloride. The plaster had a pale yellow color, and contained thirty-two per cent. mercury by analysis, dissolved freely in oils, and was suggested as a substitute readily made for the oleate of mercury, and as having the same therapeutic value.

Prof. J. F. Judge then presented to the College some specimens of Chinese blistering bugs, with the following remarks:

" Occasionally during the last three years there have been imported small lots of a peculiar vesicating bug from China. These have passed into use and appear to have given satisfaction as a substitute for cantharides. Having procured some of these bugs, I have the pleasure of presenting to the College a few specimens of two distinct species. They belong to the genus *Mylabris*, in which there are collected many species. Those presented are the *Mylabris cichorii*, and the *Mylabris phalerata*. The two species are generally found mixed in the commercial article, but can easily be separated, owing to the great difference in the size of the individuals of the respective species, *M. cichorii* being much the smaller of the two.

" *Mylabris cichorii*, Fabricius; chicory Mylabris, or Telini fly, correspond to the following description: Villous, elytra black, with two ochraceous spots and two bands of like tint; length, eight to ten lines.

" This species, the best known, occurs in some localities in the warmer parts of Europe as well as in Asia, and finds acceptable food in the flowers and leaves of the wild chicory and other Asiatic plants of the natural order compositæ. They are very ravenous, and during the rainy season are found in large numbers. They are collected from July to the end of October. During September the females are full of eggs, each producing about one hundred and fifty of these, which are about the size of caraway seeds. At this time they are provided more abundantly than at others, with a yellowish oily secretion, which issues from the knee-joints of their legs whenever they are handled; and as this oily secretion appears to be rich in the vesicating principle, they should be collected for medicinal use during the month of September.

"*Mylabris phalerata*, Pallas, Sida Mylabris. They are villous, black, elytra black, with three broad undulating rufescent bands; the first frequently divided into spots; the bands are of a deeper shade of color in this species than those of cichorii; length, thirteen to sixteen lines.

"This species is found in China, Cape of Good Hope, and other countries. They feed on such plants as the *Sida* and *Hibiscus*.

"The medicinal properties are thus stated by the Pharmacopœia of India: 'The same as cantharis vesicaatoria, for which it affords a complete substitute as a vesicant. As an internal remedy it should not be substituted for the tincture of cantharides, as the strength and operation of the latter is well ascertained, which is not the case with our present articles. It is regarded as more powerful than the European article.'

"The medicinal agent in Chinese bugs is the same as that in cantharides. In 1810, Robiquet discovered *cantharidin* in Spanish flies. In 1828, Bretonneau found the same in Chinese or Telini flies. The percentage of cantharidin according to Fumouze may be taken as O. 415 in cantharidis; in the hard parts only O. 118, in the soft parts O. 778 per cent.

"Prof. J. M. Maisch has examined the Mylabris with a view to determine their cantharidin strength. The process resorted to was that of Fumouze. Six hundred grains of the powdered bugs was exhausted by successive portions of chloroform. The chloroform solution was evaporated spontaneously, and the brown residue next treated with carbon disulphide, and the solution separated from the undissolved cantharidin by filtration and subsequent washing with carbon disulphide. After the odor of the carbon disulphide had disappeared, the cantharidin was all dissolved by chloroform. The chloroformic solution, evaporated spontaneously to dryness, yielded the cantharidin.

"The cantharidin thus procured from six hundred grains of Mylabris, was 6.097 grains, of a pale yellow color, constituting 1.016 per cent. If 0.40 per cent. is the average cantharidin strength of Spanish flies, then that of Mylabris is two and a half times as strong.

"It would, therefore, appear that Chinese blistering bugs furnish us with a very rich source of cantharidin.

"For further information I would refer the members to a paper by Prof. Maisch on this subject, in the proceedings of the American Pharmaceutical Association, session of 1872."

Poisonous Chewing-gum.—A specimen of what is called gum-elastic chewing-gum has been examined by Prof. Wayne, and the red color of the same was found by him to be vermilion (sulphuret of mercury).

Adulteration of Castile Soap.—A large portion of the castile soap now in the market is largely adulterated. A specimen examined by Prof. Wayne was found to contain twenty per cent. of sulphate of baryta. This adulterated soap may be readily detected by its specific gravity, it being so much heavier bulk, for bulk, than the genuine castile soap.

Elimination of Salts of Mercury in Man.—D. Byasson has been performing a series of most interesting researches, with the object of making out what time it takes for a soluble mercurial salt, when introduced through the stomach, to be detected in the urine, saliva, and sweat. These researches may have some influence on the treatment of syphilis. The more important results may be summed up thus: 1. Bichloride of mercury taken by the stomach may be found in the urine about two hours after its ingestion. 2. It takes four hours to be found in the saliva. 3. It seems impossible to find any in the sweat. 4. Twenty-four hours after the ingestion of the salt, its elimination may be considered to be achieved. 5. Part of it is to be found in the fecal matter. Conclusion: No. 3 is especially worthy of notice. If mercury is not eliminated through the cutaneous emanations, how, then, does it act in syphilis? says the author. Is it by its action on the *crase* of the blood that it has an effect on the skin? Dr. Byasson purposes to pursue the elucidation of this question, together with the two following ones: Is elimination as rapid when an individual successively ingests more considerable doses of mercury? and is it true that mercury accumulates in the system?—*Robins' Journal d' Anatomie et de Physiologie.*

Editorial.

The American Medical Association convenes in St. Louis, Tuesday, May 6th. We suppose the usual railroad facilities are provided for, and that members will receive excursion tickets; but up to the time of our closing up this number, we have not received any statement in regard to the matter. We hope to print the proceedings, or an abstract, in our next issue.

Ohio State Medical Society meets in the city of Columbus on the 10th of June. The place of meeting this year is so central and easy of access, that we trust our friends all over the State will arrange to be in attendance, and committees be prepared with their reports. For several years past these meetings of our State Society have been exceedingly interesting, both socially and professionally, and we trust, in all respects, the meeting for 1873 will be better than any of its predecessors.

Medical Journals Suspended.—Several of our most valued exchanges have suspended. The *Journal of the Gynecological Society* of Boston closed with the end of 1872, having issued seven volumes. The *Michigan University Medical Journal* is discontinued with the end of vol. 3; and the *American Psychological Journal*, so ably conducted by Dr. Hammond, is suspended.

The Obstetrical Journal of Great Britain and Ireland.—Mr. H. C. Lea, of Philadelphia, will commence from April a reprint of this valuable journal, to which will be added an American supplement, edited by Dr. Wm. F. Jenks. The *Journal* is to be issued in monthly parts of about eighty pages each. The subscription is to be $5 a year. This will be an attractive journal to all medical men, but especially those engaged in obstetrical and gynecological practice will be glad to subscribe for it.

Personal.—Our neighbor, Prof. Whittaker, of the "*Clinic*," has taken to himself a bride from among the fair daughters of New York, and, like a sensible man, has settled down to domestic life and happiness. So, too, Dr. J. C. Culbertson, of this city, has taken to himself as wife, Miss Pogue, of Walnut Hills. We congratulate all parties.

The Healing of an Amputated Limb and its Subsequent Condition. By B. Frank Palmer, LL.D.—For the benefit of persons not familiar with osteology, or the anatomy of the bones, and the manner in which an amputated limb heals, it is important to give some information in order that mutilated persons may understand the perfect safety of the new method of bringing the amputated end of a limb, in its membranous sack, into contact with an automatic socket, as a *point of support.*

There is a popular and almost universal misconception among the mutilated, which, indeed, is shared in by many surgeons; and while this exists, and the true condition of the stump is not understood, a person can not make an intelligent or suitable trial of the new method, as a slight disturbance of the muscles over the end of the stump in the abnormal condition incidental to an amputation, will give unnecessary anxiety, and a groundless fear of forcing the end open by such contact.

An examination of a section of a bone of the leg, shows two kinds of tissues combined in the composition—one of which is dense and compact in texture, like ivory, and the other open and spongy. The compact tissue is always on the exterior, and the spongy or cancellated tissue is always internal. The femur, tibia, and fibula (bones of the thigh and leg), are made up mostly of spongy tissue with a surface of compact substance. These bones are filled with innumerable minute blood-vessels, both the spongy and compact portion having arteries and veins that ramify in a fibrous membrane, the periosteum, which (like the skin of an eel) covers and bands the surface of the bone.

When a bone is divided by amputation, these arteries throw out a plastic substance, which perfectly *seals over and rounds up* the end of the bone. This secretion, at first an albuminous exudation, soon toughens into cartilage, and then ossifies completely, forming a rounded end of the same texture as the outer tissue of the shaft of the bone. Over the smooth end of the bone a perfect covering of tough fibrous membrane, the periosteum, unites completely and forms a perfect shield. Then the integuments, muscles, and skin unite, each to its kindred substance, to complete the work of nature in really *healing*, not simply covering, her wounded members. Even in amputations of a questionable kind, without flaps, when the new covering has been formed by granulation, I have found that the rounded end of the bone, protected in its fibrous *coat of mail*, the periosteum, and covered with the new-made skin, is capable of sustaining the weight of the person with perfect safety and comfort in the automatic socket. Here, it is seen, the end of a bone after amputation, becomes as complete if in the shaft, as when cut through an articulation according to Symes' method. In use, the periosteal sack thickens over the end of the bone, and the end spreads like a knuckle inured to toil. The effect is to produce a kind of ball, sealed in the membranous sack, which is firm and indestructible. The rounded bone rests as securely in this sack as a knuckle, or the *os calcis* in the covering of the heel. Thus nature carefully completes her work. Then, if the surgeon has done his work as well, there is a perfect cushion of muscles, tissues, and integuments, sealed in a complete skin, with only a scar on the outer surface.

The periosteum forms a partition between the end of the bone and the outer coverings, which all unite completely, as each substance seeks union with another of similar texture, and if it does not find analogous particles in immediate contact, they are generated and thrown out to form a perfect union.

Now, it is seen that the bone becomes perfect. The periosteum unites over the end, sealing it indestructibly—muscle joins muscle, tissue joins with tissue, skin unites with skin, each closing in its natural order, and all combining to form a *sound point of support* as perfect, of its kind, as the condyle, the knuckle, or the *os calcis*. *Use* only is wanting to restore a comfortable feeling under pressure.

Here is a solution of the troublesome problem—*the point of support*—and here may disappear all fears of resting on the *end of a stump*, if set in a suitable socket which will insure comfort and safety in active use. Persons who once feared to touch the end, put their weight on the stump and standing thus, lift two hundred pounds. They press the stump to get the most complete muscular action. Some, at will, move all the muscles about the end of the stump freely like toes, and the sensation is the same as that of moving the natural toes.

It is only necessary now to reverse the old belief that it *can not*, and know it *can* be done. In the safety socket a person experiences the sensation of *walking* instead of *going*, and of *standing nat-*

urally in a support which feels so much like a soft boot on the sound foot as to cause one to almost fancy the lost member regained.

The New Palmer Leg, with the safety socket and automatic mechanism, was patented April 8, 1873, and is now made only by the inventor, Dr. B. Frank Palmer, 1609 Chestnut street, Philadelphia.

The Toner Lectures.—April 18th ult., Dr. Brown Sequard delivered the second in course of the "Toner Lectures" in the city of Washington. The following abstract, taken from a Washington paper, will be read with interest:

"Dr. Brown Sequard's lecture on 'The Nervous Force'—the second of the Toner course—was delivered last evening, at Marini's Hall, before an audience remarkable alike for quantity and quality. The Doctor's world-wide fame appeared, notwithstanding the threatening aspect of the weather, to have drawn out the whole army of Washington scientists. In every part of the room might be seen the well-known face of some gentleman who has won local distinction by his persistent efforts in extending the bounds of human knowledge, or storing up in his mind the result of previous investigation. A few *dilletanti* hung about the skirts of the crowd, and row upon row of doctors in solid phalanx filled the body of the hall. Even quite a bevy of ladies were present, and an equal number of blushes at certain parts of the lecture.

"Professor Henry introduced the lecturer with a few laudatory remarks, referring incidentally to the recent great advance of the cause of science in this country, the liberal donations of Congress, and the bright prospects of the Smithsonian Institution.

"Dr. Sequard's remarks were concise, and replete with valuable facts. No inquiry was attempted into the occult causes and nature of the subtle power which caused the strange phenomena that he described. Once or twice some telling anecdote or bit of illustration was introduced, provoking hearty peals of laughter.

"The speaker, after a few preliminary remarks on the subject of his lecture, said that the variety of phenomena in the nervous system is much greater than is generally supposed, even by medical men. All sorts of skin eruptions are more or less traceable to nervous disorder. Experiments in animals had shown that the eruption followed immediately after exciting certain nerve centers. It was only within the last ten years that it has been discovered that a bed sore was due, not to pressure of the bed, but to spinal lesion, or spinal irritation; when, for instance, an irritation in the spinal column was produced, a bed sore appeared. They often come on parts subjected to no pressure whatever.

"Elephantiasis, a disease peculiar to South American countries, may be caused by an affection of the nerves by tumor. Bones are injured by nervous influences, as are joints, the former not only diminishing in size, but their marrow wasting. Pain in the joints is caused by an irritation at the base of the brain.

"The lecturer referred to various physiological effects caused by an irritation at the base of the brain, giving among many instances the following: The knee in one night might be made twice its usual size. Immediate injury to the lungs might be produced. A number of white corpuscles could be made to appear in the blood. Indeed, the brain itself should be considered as a part of the nervous system. The irritation arising from severed nerves sometimes caused an injury to the spinal cord. A lesion of the spinal cord might change the structure of the brain. Disease of any part of the brain does not necessarily arise directly from injuries to that particular part, but may proceed from some other part of the nervous system. An irritation starting from the cerebellum, on the left side of the head, often causes loss of sight of the right eye or *vice versa*.

"An injection of cold water in the ear will make a person stagger or trot round in a circle like a horse in a circus. The Duke of Wellington, like many other noblemen, was stupid enough one time to consult a quack, who injected nitrate of silver in his ear, and set the duke rotating faster than he (the lecturer) could make his arm go. [Laughter.] The lecturer here read an extract descriptive of a high-seasoned dish, of which Frederick the Great one time partook. Not satisfied with this mess of garlic and spiced meats, he ate directly afterward a veal-pie so hot that it seemed to have been baked in hell. He was seized with convulsions. Perhaps it would have a different effect on the speaker, as he was not a great man. [Laughter.]

"A great variety of effects were produced by apparently the same cause, as in the case of persons in a perspiration coming out of a theater; some took cold in the head, lungs, throat, and so on. In each nervous system there are parts which are easier to excite than others. Exciting certain nerves will contract blood-vessels, and produce attraction of the blood by tissues. When the nerve running to the heart is galvanized, the action of the heart is stopped. Indeed, whenever we breathe, we produce a decrease of action of the heart. The exchanges between tissue and blood are stopped by certain forces of the nervous system. The loss of consciousness in epilepsy is caused by irritation of the *medula oblongata.*

"Stick a pin in your spinal column, and it will produce complete paralysis. Coughing can be stopped by distending one's nostrils with the finger and thumb. A pressure of the finger upon certain parts of the face will stop sneezing; and by pulling down the sufferer's big toe, convulsions may be stopped. The lecturer, after giving several examples of this character, concluded his address by thanking the audience for its attendance and attention."

Academy of Medicine.—Some time since, we noticed the election of officers of the Academy. We are kindly furnished by the Secretary with the complete list of officers, as also the committees for the year:

President—John H. Tate, M. D.; First Vice-President—A. C. Kemper, M. D.; Second Vice-President—Byron Stanton, M. D.; Recording Secretary—J. W. Hadlock, M. D.; Corresponding Secretary—N. P. Dandridge, M. D.; Treasurer—W. T. Brown, M. D.; Librarian—C. S. Muscroft, M. D.; Trustees—W. P. Thornton, M. D., J. J. Quinn, M. D., C. S. Muscroft, M. D.

STANDING COMMITTEES.

Admissions—Drs. Ludlow, Minor, Logan.
Ethics—Drs. Stanton, Walker, Norton.
Publications—Drs. Hadlock, Stevens, Whittaker.
Executive—Drs. Ludington, Brunning, Tucker.

SECTIONS.

1. Physiology and Hygiene—Drs. Whittaker, Rives, Woodward, F. P., Anderson, Heighway, Keith, Worthington, Comegys, Jr., Gillane, Miller, C. A., Bonner, S.

2. Pathology and Morbid Anatomy—Drs. Dandridge, N. P., Gobrecht, MacKenzie, Taylor, Jones, Geo. E., Kemper, Schwagmeyer, Schmidt.

3. Materia Medica and New Remedies—Drs. Stevens, Holtge, Tibballs, Mosenmeyer, Schneider, Querner, Wade, Courtright.

4. Forensic Medicine and Toxicology—Drs. Brown, W. T., Dan-

dridge, A. S., Temple, Stanton, Underhill, Nickels, Maley, McReynolds, Drake.

5. Diseases of the Skin—Drs. Juler, Rosenfeldt, Wright, C. O., Carrick, Sittle, Tucker, Cassatt, Riffe.

6. Diseases of the Nervous System—Drs. Bartholow, Holdt Bigney, Minor, Bettmann, Divan, Wenning, Cilley, Judkins, Wm., Gerwe.

7. Venereal Diseases—Drs. Conner, Kearney, Judkins, C. P., Davis, O. E., Culbertson, Zipperlin, Nardyz.

8. Ophthalmology and Otology—Drs. Buckner, Seely, Williams, Ayres, Aub, Schmidt, Potter, Herron.

9. Diseases of the Abdomen—Drs. John Davis, Graham, Jessup, Hetlich, White, Vattier, Raschig.

10. Diseases of the Thorax—Drs. Carson, Holdt, Henderson, Logan, Keck, Murray, Brunning, King, Jones, Geo. E., Wolfe.

11. Prevalent Diseases—Drs. Murphy, Davis, W. B., Good, Woodward, C., Clendenin, Klein, Hadlock, Fishburn, Schmuck, Watson, Illoway, Thornton.

12. Zymotic and Blood Diseases—Drs. Comegys, C. G., Davis, John, Norton, Stark, Walton, Baum, Vaughan, Brent, Ludington, Marcus.

13. Obstetrics and Diseases of Women and Children—Drs. McMechan, Reamy, Quinn, Wright, M. B., Mendenhall, Palmer, Richardson, Tate, Miles, Cleveland, Walker, Brown, A. M., Ludlow.

14. Surgery—Drs. Dawson, Wood, Mussey, Muscroft, Thomas, Miller, B. F., Young, Bramble, Kearns, Orr, Graff.

PRESIDENT TATE'S ADDRESS.

We also give President Tate's address, delivered upon taking the chair:

GENTLEMEN: On taking the chair as your presiding officer, I can not but express to you the sense of obligation which I feel for the honor which you have thus conferred upon me. Indeed, I do not perceive how it could be viewed in any other light, when we consider that this academy is the sole representative of scientific medicine in a great central city, whose inhabitants are distinguished by their cultivation, intelligence, and the eminence of many of her citizens

When looking over the meetings of this society, one can not fail to be struck with the fact, that quite a large number, and some, too, of the most reputable members of our profession, seldom or never meet with us here. Does not this indicate that there is among ourselves a want of proper appreciation of the relations of this association to the profession, and to the public at large?

Let us, then, look at this subject a little, and see if we can not detect the fallacies which control the conduct of the absentees, and, on the other hand, discover the many reasons which those have to congratulate themselves, who from week to week assemble together here. Cincinnati may properly be regarded as the commercial and intellectual capital of an immense territory, embracing every variety of climatic productions. This area is already occupied by nine millions of inhabitants, and when as densely settled as the kingdom of Prussia, will possess a population of eighty millions. Throughout all this territory and to these people she is daily and weekly sending forth her newspapers, periodicals, and medical journals. In the latter (which rank with the best in the country), I venture to say that there are no pages which are looked for with more interest, or read more universally, than those which contain the proceedings of this academy. The opinions of our eminent members are taken as authority; our discussions excite a renewed interest in medical science throughout this wide territory; and what concerns us especially is the fact, that they are regarded as the measure by which to estimate the advancement and intelligence of the medical profession here. It is taken for granted by the profession in the country, that if there be any medical talent in our city, it will manifest itself in the discussions which take place in this hall. If, then, there are among those who stay away any who feel conscious of possessing experiences and abilities which might be advantageous to us here, they should clearly understand that they are not only depriving themselves of the advantages which are universally admitted to attend from the association of men engaged in scientific pursuits, but that they are doing what they can to lower the estimation in which our profession here is to be held by the general and medical public at large. Now the only reasons I have ever heard to justify such absenteeism are—

1. That these meetings interfere with the business of members.
2. That our discussions often give rise to personal animosities and expressions calculated to mar the kindlier relations of professional life.

The force of the first of these objections may be almost wholly overcome by a consideration of the facts, that the time occupied in our weekly meetings is less than two hours; the place of meeting is well known; the time of return may be equally well known;

and calls of emergency may at once be sent to the place of meeting.

The second objection, which refers to the jars and animosities which our discussions occasionally engender, is, I think, of even less force than the one to which we have now referred. Difficulties of this kind are not peculiar to medical societies or medical men; they are found obtruding into the assemblages of lawyers as well; nay, even in the convocations of the clergy it is seen that affairs do not always go on with that harmony which characterizes the movements of the spheres.

> "E'en in the tranquillest climes
> Light breezes will ruffle the flowers sometimes."

In fact, the trouble has its origin in the constitution of man, and those who will not take him as he is, with all his defects and follies, and work with him and for him, will be found in the end to have accomplished very little for themselves, and still less for the benefit of mankind.

The field which opens out before the younger members of this academy seems to me to be especially fertile and attractive; and if they will only prepare in due time to put in the scythe, by and by the harvest-home will be celebrated with becoming joy. The facilities for that preparation are richly afforded by our city; in her large foreign population stimulating and at the same time giving the greatest facilities for the study of the French and German languages; in her large hospitals, where clinical practice may be daily witnessed; in her excellent arrangements for supplying medical attendance on the poor, and at the same time introducing young physicians into successful practice; in her rich and extensive public library, where all the ablest medical works may be found, and the best journals of Europe and America be read without paying a farthing; in her well-established medical schools, where can be renewed and perfected the studies of earlier years. To these may be added the advantages of hearing the able papers often read here; of seeing the valuable morbid specimens here presented; of hearing the numerous cases reported, and of participating in the *discussions* carried on in this hall. These, all together, seem to me to afford a stimulus and facility for study which should place the young men of our academy in a short time in the front rank among the members of our profession.

I have already alluded to the influence which our city, as a great center of light, is destined to exert upon the people and territory which immediately surrounds it. We must remember, too, that it is a part of our heritage to belong to that great English-speaking people who now possess nearly half the territory, and who seem destined to establish their language and their institutions over half the world. The Celtic, the Sclavonic, and the German races, as they come pouring into these new territories, whether in America or Australia, are each contributing to this sublime consummation. How inspiring is the thought that in all these lands, among these millions of people, law in future shall be read in the words of Mansfield and Marshall, poetry in the strains of Milton and Shakespeare, and medicine be studied in the language of Hunter and Sydenham. To us, how pleasing the reflection that in all the coming ages and among all these people, this city and academy, like a star of the first magnitude, shall send down its benignant light.

The following resolution passed the Academy of Medicine, March 18, 1873, and ordered that each member be presented with a copy:

"*Resolved*, That no physician, a member of this academy, make an examination and give a certificate of the same, or issue the family physician's certificate for any life insurance company, unless accompanied by a direct request from the person to be examined, and also by a fee of five dollars from the company."

American Public Health Association.—This sanatory body was organized in New York last year. Its first annual congress was held in this city, May 1, 2, and 3. A large number of physicians, distinguished for their scientific attainment were in attendance. Dr. Stephen Smith, of New York, was president. Our number being full and ready for the press at the date of these sittings, we can not give any abstact of the proceedings or discussions. We can only say at present that they were full of interest, and inaugurate an important movement in the practical study of all those matters affecting public health. On Saturday morning, Prof. Newberry delivered a delightful lecture on the "Physical Topography of this Continent," claiming for the great Mississippi basin the future home of vast peoples of the world.

The congress was handsomely entertained at the Cincinnati Hospital, Friday noon, and in the evening with a reception at the residence of Dr. Jno. A. Murphy.

Reviews and Notices.

Clinical Lectures on Various Important Diseases. Being a Collection of the Clinical Lectures delivered in the Medical Wards of Mercy Hospital, Chicago. By NATHAN S. DAVIS, A. M., M. D., Professor in Chicago Medical College. Edited by FRANK H. DAVIS, M. D. Chicago: J. J. Spaulding & Co., 1873.

We feel greatly obliged to Dr. Davis for the pleasure we have had in the perusal of his little book. We have eighteen lectures on important groups of disease, each lecture being full of practical pathological and therapeutic suggestions. The long experience and reputation of the author, both as teacher and practitioner, impart a positive value and authority to these lectures. Among the topics embraced in the volume, we find lectures on continued fever, rheumatic fever, respiratory affections, summer complaints of children, cerebro-spinal diseases, with others of like importance. The style is agreeable, condensed, and nervous. Physicians, even of the most experience, will consult this work with profit and satisfaction.

Text-Book of Physiology: General, Special, and Practical. By JOHN HUGHES BENNETT, M. D., F. R. S. E., Professor of Institutes of Medicine, etc., in the University of Edinburgh. With twenty-one photo-lithographic plates. Philadelphia: J. B. Lippincott & Co., 1873.

While Dr. Bennett on the title-page announces this as a "text-book," yet it is not exactly so in the usual sense of the expression. It is full, to be sure, but condensed. The contents of the volume are arranged in three divisions or parts: 1. General Physiology; embracing the Chemistry of the Tissues, General Histology and Vital Properties of the Tissues. 2. Special Physiology; as, Nutrition, Enervation, and Reproduction. 3. Practical Physiology, Chemical, Histological, and Experimental. The work is fully illustrated with photo-lithographic plates, most of which are very excellent. The students of physiology will find this a very desirable book of reference.

For sale by Robert Clarke & Co. Price, $3.50.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

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Original Communications.

Art. I.—A New Alterative Compound.

By J. R. BLACK, M. D., Newark, Ohio.

The profession owe much to the Messrs. Tildens, of New York, for introducing, for its convenience, fluid extracts of the various medicinal plants in common use. Their disinfectant—bromo-chloralum—is the best and most unobjectionable of which I have knowledge. As a deoderant, its power is really marvelous. I have at this time a case of cancer of the womb, with an entremely offensive discharge, which the bromo-chloralum, properly diluted and used as an injection, corrects in a very effective manner. In the case, also, of a very old bed-ridden lady, whose urine was discharged involuntarily, and which was of a very offensive ammoniacal smell—so that it was not possible to keep her bed free from its disgusting odor, until I directed the frequent use of this deoderant, and with the most satisfactory results.

But it is not this preparation to which I wish to direct attention, but another one for internal use, which these gentlemen have ingeniously prepared. I allude to their iodo-bromide of calcium compound.

But, at the outset, allow me to say that what I have written, and wish to write, is not from any desire to puff either this house or any of its preparations. To do this I have no sort of motive, but, on the contrary, the heartiest dislike. But when a physician feels himself a debtor to any one for putting a convenient and excellent remedy into his hands, it would certainly be playing the part of a professionally "prurient prude," not to feel himself free to make candid acknowledgment of the fact.

The component parts of this preparation are stated to be bromine, iodine, chlorine, calcium, magnesium, iron, sodium, and potassium. It is claimed, by a rival house, that the union is a chemical impossibility. But I do not know that the manufacturers claim that all these elements are chemically united, but only in solution. Almost the same union in a weaker and differently proportioned solution is not infrequently met with in some mineral springs, as at Leamington, England, and in the Spa of Belgium. And this leads me to write what I have often thought, that, as the curative virtues of some mineral springs are undoubted, why can not the same ingredients be concocted in a concentrated form for the convenience of the physician in the laboratory of art, as well as they are concocted in a dilute form in the laboratory of nature? It seems that the Messrs. Tilden have done this in an admirable manner in this compound of theirs—perhaps more strongly alterative than what nature usually generates. By putting a half a teaspoonful of the solution (not the elixir) in half a tumbler of water, a draught is at once prepared, which might deceive the *habitues* of some mineral springs. The taste is slightly sharp and acid, but these impressions on the palate are gone in a moment after swallowing. The primary effect, especially when taken in the morning before breakfast, is precisely that of some mineral waters—a quick, *pleasant*, aperient effect. This I have noticed on myself scores of times, and have had it reported to me by almost every one to whom I directed its free administration.

The therapeutical properties of this compound have proved, in my hands, to be alterative, laxative, resolvent, and, in a minor degree, tonic. In the epidemic, which recently passed over the country, of influenza—popularly known as the epizootic—one of its most common sequelæ in strumous subjects was an enlargement of the cervical glands. This I found to disappear in the most satisfactory manner under the use of the iodo-bromide calcium compound. In fact, it seems to have, as its composition would indicate, a special effect on the glandular structures of the neck. Chronic irritation of the pharynx, and recent enlargements of the tonsils, are also promptly benefited by its use.

In some cutaneous diseases it is one of the most valuable of our preparations. A young lady, very fair to look upon, was exceedingly annoyed by a mild yet obstinate spot of herpes on her face. Mercurial ointments, oil of cade, and other remedies of a like class, had failed to remove it. The solution applied pure to the part affected, proved effectual, after only two or three applications.

In prurigo, its beneficial action is no less apparent. This affection, as all know, is often very obstinate, and a not uncommon effect of eating freely of Polygala Fagopyrum cakes, swimming in Darwin's nectar. It is an annoying, disagreeable, and very troublesome affliction. It is often as obstinate as lichen, which is so obstinate as to have received the name of seven-year itch—a disease which a fat old gentleman once assured me he had had seven years to a day.

For the removal of prurigo, twenty drops of the solution, well diluted and continued for two or three weeks, will cure in almost every case. Such at least has been my experience. Excepting for children and adults of very fastidious taste, I prefer the solution to the elixir. It is more active, and when properly diluted, more readily absorbed than the elixir. Considering that when it is deemed desirable to administer an alterative other than the mercurial, we are almost limited to the iodide of potassium, this preparation should be welcomed as a valuable addition to the list. It seems to be free from some of the objections appertaining to the iodide; such as the occasional production of severe irritation of the Schneidarian membrane, frequent irritation of the stomach, and more or less of a general debilitating effect. It is a common expression of those who have taken the compound under consideration, and for appropriate disorders, that they feel better and more buoyant, without having experienced in the least any unpleasant effect, and this is more than can be said of the great majority of our remedies.

Art. II.—The Eucalyptus Globulus and its Use in Medicine.

This remedy has recently been much in demand in Cincinnati; and the following account of it, its preparations, etc., will be of interest both to physicians and pharmaceutists:

The employment of the *Eucalyptus globulus* in therapeutics is the subject of a very important memoir by Professor Gubler, in which he expresses an opinion that it will probably prove to be a remedy worthy of being ranked with the cinchona alkaloids. We take the following particulars from the *Journal de Pharmacie et de Chimie* for December:

The *Eucalyptus globulus* belongs to the natural order *Myrtaceæ*, which furnishes the clove (*Caryophyllus aromaticus*), oil of cajeput (*Melaleuca minor*), and the pimento (*Eugenia Pimenta*). It is one of the noblest representatives of a genus that contains upward of a hundred species. It is often gigantic in size, and is impregnated throughout with an aromatic substance, which is present, however, in smaller proportions in the wood and the bark than in the flowers and the leaves. The tree is easily acclimatized in the southern provinces of France, Corsica, Algiers, and Spain; being known in the last-named country under the popular name of the Fever-tree.

An essential oil, having the formula $C_{12}H_{40}O$, is obtained from the leaves by distillation, which has been named by Cloetz, who investigated its composition, eucalyptol. The results of this investigation have already been printed in this journal. Eucalyptol has an agreeable, fragrant, aromatic, and peculiar odor, which by some has been compared to camphor, by others to rose or lavender. It has an aromatic, warm, and bitter flavor, accompanied by a slight acidity and freshness at the back of the throat; when in excess, however, it produces a burning sensation, and an increased secretion of saliva. Doses of from two to four grams and upward cause a disturbance of the digestion, sometimes succeeded by a diarrhea in which the motions, like the eructations, recall the smell of the eucalyptus. Large doses sometimes cause headache, excitement, and fever, with accelerated respiration, thirst, sickness, and generally sleepiness; upon anæmic persons, however, it acts as a narcotic. The symptoms rarely last more than a few hours. In most cases one to two grams can be tolerated at first, and in all cases the patient easily becomes habituated to its use. The physiological action of the leaves is very similar, and it has been found that they can be taken by fresh patients in larger doses than the free essence.

In Australia the *Eucalyptus globulus* is the popular remedy for fevers, and in Europe it has been used successfully in the treatment of diseases prevalent in marshy districts. M. Gubler quotes the testimony of several medical practitioners, who say that it produces marvelous results in cases of intermittent fevers, especially obstinate ones where sulphate of quinine has been used without effect. He also points out that in marshy districts near to eucalyptus forests intermittent fevers are unknown—a result that he attributes either to the neutralization of the effluvia by the aromatic emanations from the trees, or else to the sweetening of the stagnant waters by the leaves and pieces of bark that fall into them; such waters, according to travelers, being perfectly potable. Efforts are therefore being made to increase the number of eucalyptus plantations in the marshy and insalubrious districts of Corsica and Algeria.

The tincture, infusion, and decoction of eucalyptus are used for disinfecting the dressings of wounds. M. Mares has employed fresh young leaves as a local stimulant to small wounds slow to cicatrize. Dilute essence, infusion and distilled water of the leaves are used as astringents and hæmostatics. The preparations are also used with success in purulent catarrhal affections of the urethra and vagina. The leaves, when masticated, perfume the breath, and harden spongy and bleeding gums.

The presence of the essence of eucalyptus retards in a remarkable manner the development of cryptogams. According to M. Gubler, solution of salts of strychnia, atropia, morphia, and aconitia, prepared for hypodermic injection with the distilled water of the leaves, remained clear for many weeks; while others, prepared at the same time with pure water, became turbid with confervoid growths in a few days.

The following are the pharmaceutical preparations of eucalyptus that have been found convenient in use:

1. The *powdered leaves*, which is the best form, and is prescribed in doses of four, eight, twelve, and even sixteen grams a day.

2. The *infusion* and *decoction*, which M. Gubler recommends should not be submitted to too much heat, in order not to drive off the essence.

3. The *distilled water* of the leaves, an agreeable vehicle for stimulants.

4. An *aqueous maceration of eucalyptol*, with the same properties.
5. The *aqueous extract*, recommended by M. Carlotti to prevent the return of intermittent fever.
6. The *alcoholic extract*, *tincture* and *alcoholate.*
7. *Eucalyptol*, which is administered either in pills or in capsules.
8. *Inhalations* of eucalyptol.—*Pharm. Jour. and Trans.*, *March* 2, 1872.

Tennessee Opium.—The *Nashville Journal of Medicine and Surgery*, October, 1872, contains the following: Considerable interest has been manifested, during the last few years, in the cultivation of the poppy for opium, near Nashville. A small quantity of the imported seed of the white poppy was planted by Dr. Pitts, in the spring of 1871, and the seed thus obtained used exclusively this year, with very fine success, the plants being larger and more vigorous, and the capsules from two to ten times as large as those from the imported seed. A sample of the opium, prepared this summer, was found to possess the peculiar narcotic odor and bitter taste, and presents a smooth, tenacious mass, of a dark-brown color. One hundred grains, when dried, yielded eighty-three of powder, and, upon examination, eleven of insoluble matter, mostly clay and sand, and ten of alkaloids, equal to about nine grains of morphia.

John Weiss, in his admirable course of lectures on "Characters of Shakespeare," now being delivered in this city, only puts in his own picturesque phrase a sound hygienic principle when he says: "Every laugh reddens the blood, which goes then more blithely to dissipate the fogs of a moody brain. Multitudes of our American brains are badly drained in consequence of a settling of the wastage of house-grubbing and street-work into moral morasses which generate many a chimera." Specialists in nervous diseases and mental alienists would miss many patrons if, as a nation, we would give more time to—

"Sport, that wrinkled Care derides,
And Laughter holding both his sides."

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE.

J. H. TATE, M. D., PRES'T. J. W. HADLOCK, M. D., SEC'Y.

Puerperal Convulsions.—A Paper read to the Cincinnati Academy of Medicine, by JOHN H. TATE, M. D. Lecturer on Obstetrics and Diseases of Women, for the Good Samaritan Hospital.

Disease and death are at all times repulsive to the finer sentiments of our nature; but there are occasions when they approach at a period so untimely and so suddenly, so appallingly, that we are apt to be surprised, terrified, and overwhelmed.

Such is the character of that disease which it is now our object to consider.

The nature of this affection was shrouded in mystery until, in 1843, Lever, in London, commenced his researches into the relations which exist between puerperal eclampsia and derangements of the kidneys. Simpson about the same time engaged in researches in a similar direction, and their opinions were soon after examined in Germany, and confirmed by Frerichs, Braun, and others. At first it was supposed that the coma and convulsion of eclampsia were the result of the retention of urea in the blood—a sort of uræmic intoxication—but Frerichs has arrived at the conclusion that the urea is first converted into carbonate of ammonia, and that this is the agent that induces the morbid phenomena. As confirmatory of this view, Petroff and Spegeburg have found, by experiments on animals, that carbonate of ammonia, when injected into the circulation, will produce both coma and convulsions.

By these researches the old opinions that this disease was caused by plethora, cerebral congestion, or nervous irritation, are all completely overthrown, and we may fairly, I think, come down to the conclusion of Braun, that without kidney derangement there can be no such thing as puerperal convulsions. We are confirmed in this view, too, by the great number of cases which have now been published, illustrating its truth; by the fact that persons affected with Bright's disease generally die with convulsions and coma; and that children who have had scarlatina, followed by edema and albuminuria, are very liable to convulsions. I may say, too, that since my attention has been directed to this point, I have not seen a single case of puerperal eclampsia which was not attended by edema and albuminuria.

Here, then, we find what I regard as the predisposing cause of this disease—something without which it can never exist, viz: a corrupted state of the blood, dependent upon an interruption of the depurative functions of the kidneys; the recrementitious matters thus retained, circulate in the nervous centres and produce there such an *erethism* as makes them particularly sensitive to morbid impressions made on the peripheral nerves.

In Asiatic cholera we find that when it first appears, and when the poison exists in its greatest force, persons in health are sometimes suddenly stricken down, and in an hour succumb to its power. This, however, is not the general course of its action: for the most part the morbific agent enters the system, and lies dormant until some undue exertion, or some irritant in the alimentary canal applies the torch to the train, and then the fearful explosion is soon found to follow.

It is thus with puerperal eclampsia. The amaurosis and pain in the head, which comes on sometimes previous to convulsions, would seem to indicate that there is often hyperæmia of the vessels circulating the blood in the brain and medulla; and it is possible that in some rare instances the morbid materials contained in the blood may induce such a perturbation in the nervous centres as to bring on directly what are sometimes termed centric convulsions. We apprehend, however, that this is rarely the case; on the contrary, in general, we must not only have a predisposing cause, but likewise an exciting cause before their evolution is possible. Now to these exciting causes we invite attention as matters of great practical value.

They are: 1. Unusual movements of the child in utero; 2. Indigestible matters in the stomach and bowels; 3. Hemorrhoids and irritable rectum; 4. Pressure of the head on the os uteri; 5. Pressure of the head on the perineum; 6. Hard clots remaining in utero after labor; 7. Introduction of the hand in utero; 8. Distended bladder; 9. Mental shock or anxiety.

The irritation begun in the peripheral nerves of these parts, passes at once to the nerve centres; from thence by reflexive action it is thrown upon the nerves of motion, and at once the convulsive paroxysm comes on.

Puerperal eclampsia occurs almost invariably in primiparæ:—

Ramsbotham	45	times	in	59	cases.
Collins	29	"	"	30	"
Lee	30	"	"	46	"
Clarke	15	"	"	19	"
Merriman	30	"	"	46	"
Tate	13	times	in	16	cases.
Average	76 per cent.				

The exceptions to this are women carrying two or more children; those whose uteri are distended with an unusual amount of liquor amnii; those who have had long intervals between the birth of the children; those affected with chronic kidney disease. The more common occurrences, as well as the exceptions, would seem to indicate that the function of the kidney is probably interrupted by pressure of the distended uterus either upon the kidney itself or upon the emulgent veins—this pressure being made unusually severe in the case of the primipara by the unyielding abdominal walls, and in the other by the very unusual size of the distended uterus. But how shall we explain those rare cases where the convulsion takes place as early as the fourth or fifth month? The difficulty here is not to account for such cases occurring without kidney disturbances; for this is present here as in other cases (as is indicated by albuminuria): but how is it that the kidney becomes disturbed? It is probable that in these examples the kidney is deranged by reflex action from changes that are taking place in the ovary or uterus, owing to its new condition—just as we see in other cases, the functions of the stomach, or bowels, or brain, disturbed from the same cause.

In a post-mortem examination of a woman who died a few months ago of this disease, in this city, the kidneys were found in a high state of congestion only; and from the fact that in general all traces of morbid action, soon after labor, pass away from the urine, we may conclude that in most instances there is no structural change made in the kidney, though acute inflammation, with pus and granular degeneration, have been observed. Convulsions, when properly regarded, can only be considered as the manifestation of a morbid condition of the medulla spinalis and oblongata, with which the brain proper has little or nothing to do, for the cerebrum and cerebellum can only affect the muscular system, by moral emotion, by an irritation of their meninges, through branches of the fifth nerve, by a downward pressure upon the medulla, occasioned by great vascular fullness, or by serous or sanguineous effusion. Now, these are for the most part the *results*, not the occasion of the convulsions. In order to properly appreciate these phenomena, let us observe what takes place in a convulsive paroxysm. There is first a twitching of the muscles of the extremities or the face; next, violent contractions of the muscles, especially those on the sides of the neck; the glottis is soon closed, and respiration suspended; the blood no longer aerated, the face turns purple, and consciousness is lost. Now, the interruption to the respiration, and the contraction of the muscles resting over the veins on the side of the neck, must prevent the return of blood from the head and nervous centers, and overwhelm them with venous blood. In the meantime, the heart still goes on pumping an additional amount of blood toward the brain and medulla; hence, the congestions and effusions—hence, the danger that the nerve centres will be ruptured.

We have said that without the predisposition of blood-poisoning, there would be no convulsions. True, occasional cases are reported when this was said not to have been the case; but they may be accounted for by the suggestion, that in them probably but one kidney may have been affected, or that a change in the position of the child, or of the uterus, may have given temporary relief, and thus the urine become normal. I am satisfied, however, that in most of these cases there is a mistaken interpretation of the facts which are given. Examples of this kind are given by Bedford and Elliotson; and yet a careful perusal of these cases, as they report them, detects the presence of the fatal *edema*, pointing unmistakably to kidney disturbance.

TREATMENT.—In regard to the treatment of this disease, we may remark that it is a mistake to suppose that every woman who has albuminuria will, of necessity, have convulsions. Equally is it an error to imagine that every woman who is taken with eclampsia must, of necessity, die without treatment? On the contrary, we have no doubt that some would recover if left alone; and we feel even more sure that a few have recovered, notwithstanding the most improper treatment.

Still the disease must be viewed as not only a very alarming, but a very perilous one; and hence its proper method of treatment presses on our attention.

The treatment of this form of disease has varied greatly at different periods. At one time, when it was looked upon as a nervous disorder, it was treated with anti-spasmodics and narcotics; when opinion changed, and it was supposed to depend simply on plethora, venesection was almost invariably employed; and latterly, since it has been ascertained that the blood is diseased, the treatment has undergone another change, and, in fact, at present, there is a great discrepancy of opinion as to the course to be pursued. Some, losing all confidence because they can not at once change the state of the blood, follow an expectant plan; some rely solely upon ether and chloroform inhalations; others renew the old method of treatment by narcotics, but employ the hypodermic syringe; while many still go on employing the lancet, and proclaiming their success.

In order properly to treat this affection, there are five things which must be kept clearly before the mind, viz: the general condition of the patient; the predisposing cause; the exciting causes which induce, and often keep up the disease; the tendency to death, which is manifested by its progress when left uncontrolled; and lastly, the time in the puerperal period at which convulsions occur.

I. CONDITION OF THE FEMALE.—We have already stated that seventeen-twentieths of all cases of puerperal eclampsia occur in primaparæ. Now, they, with great invariability come to the close of gestation with their digestion in excellent condition, and with the vascular system in a state of plethora. This plethora may be serous, and in a majority of cases, there is effusion into the areolar tissue of the face and upper extremities—a condition which should not be confounded with a similar state of the lower limbs, often the result simply of pressure on the femoral veins. Demart and Hamilton called attention to this fact at the beginning of this century, but it is remarkable how many authors have since failed to notice its frequency, and in fact only speak of it, as it were, by accident.

This serious plethora, with edema, gives a dingy, colorless expression to the features, and has therefore been confounded with anemia; whereas, when blood is taken, there is found an abundance of red corpuscles, though of course there is relatively an increased amount of serum.

Just here, perhaps, it will be well to notice the views of Traube and Rosenstein, who regard this disease as an acute edema, with consecutive anemia and cerebral disturbance. But the edema in this case is nothing more than an effusion into the areolar structure, such as ordinarily results from obstruction to the functions of an important emunctory, and I do not see with what propriety acuteness is ascribed to an affection which often comes on so stealthily as to require days and weeks for its manifestation. As to the consecutive anemia, it is a mere piece of phantasy on the part of those who can look no deeper than the skin, and is utterly disproved by the richness and coagulability of the blood, as well as by most of the circumstances attendant upon the development of this disease.

II. THE PREDISPOSING CAUSE.—Of this we have already said sufficient to impress every one with the importance of its influence in determining an enlightened treatment.

III. We must keep in view the exciting causes. What these are we have already indicated, and we will illustrate the importance of giving proper attention to them in some cases, which we will presently report.

IV. A due regard must be given to the tendency to death. Death in these cases results from congestion, accompanied with serous or sanguineous effusion upon the surface, or into the substance of the nervous centres, or from coma, which becomes more and more profound as the interval between the paroxysms becomes less, until at length respiratory movements are altogether suspended. This coma is no doubt due in part to the frequent swamping of the nerve cells in adulterated venous blood, and in part to the undue pressure to which they have been subjected in consequence of the congestion.

Lastly, the importance of regarding the period of gestation at which the convulsions may appear, will be sufficiently shown in the cases which follow.

Taking, then, into consideration, the general condition of these patients, together with the death tendency, it is manifest that the first indication of treatment is to protect the brain by a free venesection. If the pulse should rise and vascular turgescence of the eyes and face be present, and head-pain, this should be repeated, unless the convulsions can be controlled by dashing the head with cold water, ligatures applied around the extremities, and pressure made upon the carotids, or by chloroform. The value of this treatment is illustrated by the following cases:

CASE 1: 1853.—Mrs. S., aged 30, primapara; abandoned by her husband and left in great destitution; has been melancholy for weeks; now occupies a pallet on the floor in a room twenty feet square, in which are also two double beds, a cooking-stove, and a table. The family consists of four grown persons, two children, and four day-boarders. Was called to see her at two P. M., February 4th. Learned that she had had nine fits before I saw her. Soon after I entered, and while examining the pulse and edema of her limbs, a violent convulsion came on, lasted for some minutes, and left her entirely unconscious of everything around her. Os uteri undilated; bled fifty ounces by measure; cold applied to head, warmth to feet; stimulating injections per rectum.

February 5. No more convulsions, but comatose. Put ligatures on the extremities and rubbed them with warm turpentine. No fetal pulsations discoverable.

5 P. M. Patient now speaks, but not rationally; to be purged with croton oil; no labor pains.

February 6, 8 A. M. Was freely purged, after which labor came rapidly on, and at two A. M. she was delivered of a dead child. She now recognizes her friends, but laughs and cries; talks incoherently, and is evidently in a state of hysterical mania. She does not remember anything about her recent delivery, or of having been bled, etc.

February 9. All unpleasant symptoms have subsided, patient quite rational, and soon made a good recovery.

CASE 2.—A woman was admitted into the Commercial Hospital in labor with her first child. She was well formed, of medium size, with face and limbs edematous. She was taken into the obstetrical ward, and fell under the supervision of a gentleman who was violently opposed to the use of the lancet in such cases, and especially when attended by edema. The treatment I think consisted of injections per rectum and the administration of chloroform. The convulsions continued, and at the end of some hours the patient died. A post-mortem was held, the brain proper examined, and the case was reported as one giving no countenance to the use of venesection. Not feeling satisfied with this examination, and supposing that the medulla had about as much to do with convulsions as the brain, I persuaded the pathologist, along with another member of this Academy and myself, at ten P. M., to revisit the dead-room. The muscles of the scalp were rich in red corpuscles, and on opening the spinal canal so as to get a view of the oblongata and spinalis, we were surprised to find a clot of blood five inches long, by half an inch in width, lying upon the surface and extending downward from the oblongata over the medulla spinalis.

Having protected the brain and nerve centres from the danger of effusion, we next turn our attention to the exciting causes, and if possible remove them. As illustrative of this, take the following cases:

CASE 3.—*Irritation in Alimentary Canal.*—Mrs. M., aged 20; large head; light hair and eyes; good physical conformation; primapara; latterly troubled with headache. Labor began at daylight; nothing unusual until eleven o'clock, when the patient had a strong convulsion. The patient recovered consciousness, but soon had another fit. She was now bled to faintness. For a while no convulsion returned. Injections of salt and water were used and cold applied to the head. The convulsions returning, she was bled a second time to twelve ounces. After this, she remained unconscious, but had no further convulsion until after the delivery of the child, which took place at five P. M. All seemed now to go on well, until suddenly a frightful convulsion came on. The patient was now given croton oil every fifteen minutes; the bladder was evacuated, and urine found to be rich in albumen. The hands and face had been very greatly swollen. In a little while the oil took effect, when the patient passed a large amount of undigested green corn, which she had eaten the day before. After this, all went on prosperously. The child was born alive.

CASE 4.—*Convulsions after Labor—Blood Clots.*—Mrs. B., aged 32; primapara; a large American woman of full habit, dark hair and eyes; married nine years; has had several abortions about the third month, but no living child until now; was treated last year for ulceration of the os uteri. For some years has been accustomed to get bled for her health. Passed through a comfortable gestation; had her bowels moved the day before confinement, and has had no pain of the head or cramps, etc. After a natural labor of twenty-four hours, was delivered of a living female child at two A. M., August 11th. At seven A. M. began to complain of headache, and by ten o'clock it had become very severe; no after-pains, and the lochia about as usual; pulse 100, and firm. Ice to the head; hot fomentations to the hypogastrium; hot bottles to the feet.

2 P. M. Pulse fuller, face redder, pupils dilated, but can not see, though perfectly rational. Bled to faintness—loss, thirty ounces; other treatment continued; injections of salt and turpentine per rectum, which caused a free evacuation from the bowels. The bleeding seemed to relieve the head for a short time only.

Midnight. Patient has just had a convulsion; pulse 130, full; pupils dilated; is now blind and delirious; face red; tosses about the bed from side to side. The hand was now introduced into the uterus and brought away a quantity of tenacious clotted blood. During this operation the woman cried out with pain, and soon after it fell into a violent fit; the muscles violently convulsed; the lips sputtering; the face becoming of a deep purple; toward the end deep inspirations; and passing into coma. Bled forty ounces.

August 12, 5 A. M. Has had since last visit two more convulsions. The pulse still being firm, was bled twelve ounces.

9 A. M. Pulse 130, not very feeble; still delirious and can not see; sleeps now and then; head cool; lochia quite free; give croton oil; cut off the hair, and blistered the neck.

3 P. M. Oil has not operated; give calomel ℈i, and follow with teaspoonful doses of salts every hour in senna tea.

8 P. M. Has had no fit since morning; talks rationally, but still blind; pulse 150; bowels freely open. Drew off half a pint of urine; continue ice to the head.

August 12, 8 A. M. Patient has slept well; pulse 132; gentle perspiration; perfectly rational; face with some color, but no headache; pupils still dilated and blindness continues; continue ice to head. ℞. Autem tart. gr. iss, aquæ ℥vi: take a teaspoonful every hour. Apply the child to the breast.

9 P. M. Has a little headache; no stool to-day; pulse 120; skin cool; continue ice to head; give injection of salt and water per rectum. She now tells us her legs were very much swollen and pitted on pressure, for some weeks previous to labor. She recollects nothing which has taken place since her child was born.

13th, 8 A. M. Patient had a comfortable night; emptied the bladder by catheter; continue cold to the head; renew the senna and salts.

8 P. M. Urine again withdrawn; has had four evacuations from the bowels; pulse 120.

14th. Patient now every way comfortable; perfectly rational; sees well, and in a few days made a perfect recovery.

CASE 5.—*Blood-clots removed from Uterus.*—Mrs. R., aged 20; 221 E. Fifth; Welsh woman; sanguine temperament; well formed; ordinary stature; in labor with first child at full time; was delivered without anything unusual at one A. M.; was seen at nine A. M.; patient had slept some, but complained of a little headache; at eleven A. M. was sent for, and on coming to the house learned that the patient had been seized about an hour ago with a fit, which greatly alarmed the attendants; is now quite conscious; complains greatly of head-pain, and, before I left the room, went into a violent convulsion, which lasted about five minutes, and during which she knew nothing. I now learned that her face and hands had been slightly edematous before labor; and, on examination, the urine proved to be albuminous. During the fit she was given chloroform to inhale; after this she had a purgative of croton oil; cold was applied to the head; and the bladder emptied. The uterus was next examined, and within it a handful of blood-clots were found and removed. The patient was now put on the bromide of potassium, and this continued for thirty-six hours. The second day the pulse was 104, with some force; and the patient complained of considerable soreness over the lower abdomen. A warm poultice was put over the hypogastrium, and the patient took a Dover's powder at night. For two more days was kept upon an occasional dose of morphia and Dover's powder, with reference to what seemed to be incipient peritonitis. She soon recovered.

The patient, though a primapara, had begun to complain of after-pains shortly after her delivery.

CASE 6.—Mrs. G., aged 30 years; black hair and eyes; dark complexion; of medium size; has had several children, and now thinks herself seven and one-half months advanced; bowels regular; has for several days some difficulty in passing water.

She says the first thing she ever noticed like an attack was about three weeks ago, when, after very active motions of her child, she felt a stinging and twitching over the left side of her upper lip and face, and that she became foolish, and could not make a woman (who was in the room) understand what she said; but nothing further happened at that time. Just one month before the present attack she says she was very much disturbed in the night by active movements of her child, attended by a bearing down, so as to make her think the child was almost ready to come into the world. In the morning she arose and was walking about the room, not having taken very active exercise, when suddenly the same twitching and stinging took place in the upper lip, and she felt as if her lip was swollen, and went to the glass to look; here she was taken with twitching of her hands and extremities, and fell over on the floor, after which she knows not what occurred. Her husband, however, soon came in and found her in a fit, with her visage all blue. She had been troubled a good deal latterly by a pain over her right and left hip, rather to the right and left of the lumbar region, but anterior to the position of the kidneys. She has had no swelling of her extremities.

Monday, 13th. Called to see her; found her perfectly rational; pulse 104, full; cheeks flushed; some pain in the head, with an indefinable sensation of distress across the epigastrium. I was told she had had a fit about half an hour before, and also one a week previous. While I was inquiring about her case, the first and second finger of her left hand began to twitch back and forward; then her lips moved, and after a few seconds she fell into a convulsion, attended by rigidity of the upper extremities, contortion of the face, rolling and blinking of the eyes, loss of consciousness, and ending in a long and deep inspiration, with lividity of the face, the paroxysm lasting about five minutes, and in ten minutes after its subsidence the consciousness returned. Immediately she was bled till pale, and afterward ice-water in a bladder put to the head. In about half an hour she complained of sickness again across the epigastrium; said she could not see well, and then had two other fits, which lasted about the same time. She was now bled again; some two hours after the face became flushed again, with some headache and dizziness, when she was bled for the third time, and cold water re-applied. After this she had two more fits. The whole amount of blood taken was forty-four ounces, by measure. During most of the day she had something like labor-pains, but there was no dilatation of os uteri. For these she took camphor, dissolved in chloroform, and they gradually wore off by the end of three days. All this time the movements of the child were very active, and its pulse beat 130.

July 1. She is walking about her room, and feels quite comfortable, but says her child still moves about so much that she is persuaded she must be carrying twins.

Labor comes July 23d. The membranes ruptured during the night; last night slept tolerably well in the forepart of it, but the night previous was kept awake most of the whole night by the motions of the fetus; bowels moved yesterday afternoon. Her labor commenced about five this morning, and the membranes broke soon after. Face flushed; headache, especially over the right eye; pulse 112, but not strong; fetal pulse 140; child presenting in the first position; respiration natural; has more of that distress at the stomach.

Treatment: Her head was dashed every half-hour with a pot of water, from a height of a foot; in the intervals kept ice to it in a bladder; an arm and a leg were ligatured, to keep the current of blood from the head. When the os uteri was nearly dilated, the patient was put under chloroform slightly; under this the headache entirely disappeared, and did not return after delivery. The child (female) was born alive; was entirely healthy. The labor terminated at two o'clock P. M., the last hour only having been occupied in the second stage.

But suppose in a case occurring before delivery, we have bled the patient, emptied the bladder, and cleared out the alimentary canal, and yet the convulsions return. We have then a right to infer that the irritation proceeds directly from the uterus itself: it may be too much distended, irritated by pressure against the expanding os, or by the movements of the child in utero. In either case, it must be emptied as soon as possible. First, the amniotic sac should be ruptured, and the waters allowed to escape; if no relief follows and the os is undilated, the hot douche and Barnes' dilators should be used to open it more quickly, and when this is effected the forceps should be at once brought into requisition.

CASE 7.—P. German, unmarried, aged 19; in labor at 10 A. M. with first child; edema and albuminuria. Saw her at 11 A. M.; has had already a severe convulsion; face flushed, pulse strong; bled to pallor; cold to the head; injections per rectum. Recovered consciousness, and for a while had no convulsions; pains recurring at intervals of thirty minutes. 3 P. M.—The labor progresses slowly; convulsions have returned and the patient lies in a comatose state between them. Was bled again, but the convulsions still recur at longer intervals. By 5 P. M. the os had fully dilated, and the head come down on the perineum; the forceps were now employed and a living child extracted. The patient remained entirely unconscious during the operation, but had no further convulsions. In this coma she remained until eight o'clock the next morning, when she awoke as from a pleasant dream, and was surprised to learn what had taken place. Mother and child did well.

CASE 8.—Miss H., unmarried; at Good Samaritan Hospital; primapara; age 24; a rather delicate woman; slight edema and albuminuria. Had been in labor several hours before I saw her; pulse 90; not much force; sac broken spontaneously three hours ago, and the head has entered the superior strait; convulsions occasionally recurring, but soon after consciousness returns. The forceps were applied, and a dead child was delivered. The patient was put upon the use of the bromide of potassium and made a good recovery, though she had a convulsion after delivery.

CASE 9.—Mrs. M., American, aged 39; came to labor with her sixth child, there having been an interval of five years between the present and the last child. Has dark hair and eyes; rather spare; has often been troubled, during some years, with severe pain at the back of the neck; has some now; slight edema below the eye-lids. The presentation, cephalic; the labor begun in the afternoon and went on well from seven until eleven P. M., when the patient was seized with a convulsion, which I did not see. She however soon recovered her consciousness, and I found that the labor had now fully dilated the os, and the head was down on the perineum. Neither the force of the circulation, nor the general condition of the patient requiring venesection, I dispatched a messenger for some chloroform, intending to employ it with the view of cutting off the reflex irritation which was evidently passing from the os and perineum to the nervous centres. Before, however, the messenger had returned, the patient had been delivered, another convulsion having come on just as the head was passing through the os externum. This woman's urine was examined several times afterward and found always to contain albumen. The patient had a good recovery; child living.

The condition of the child, too, sometimes makes it necessary to employ the forceps; either the rapidity or irregularity of its pulsations shows that unless delivered it will speedily die, and therefore instruments should be employed. That the child is in special peril in this affection, is shown by the fact, that many of them die in convulsions some hours after birth, and that in some cases their urine has been found albuminous.

I might relate some other cases which I have seen in consultation, where venesection was not employed, but where the condition of the patient was very different; in three of which the mothers were lost, as it seemed to me, because the nervous centers were not protected.

There is one case, however, to which I must refer, where the patient was bled twice freely, inhaled chloroform, and yet was lost.

Mrs. P., aged 19; German; primapara; face and extremities edematous; urine highly albuminous. Was taken sick at daylight, having arrived at term. Has been in great despondency; unpleasantly situated among her relations, and her husband in prison for the commission of crime. Has had headache for several days. First saw her at 9 A. M., she having had several convulsions before I saw her. Is now entirely unconscious, but can swallow. Pulse 90, moderately full. Bled to faintness. The convulsions still returning, was given croton oil, and then put under chloroform inhalations. At midday, the fetal pulsations having run up to 150, and the os being dilatable, though not fully dilated, the forceps were used (the patient being still unconscious), and a living child was delivered. The convulsions still continue. The pulse being still firm, patient was again bled to twelve ounces, and chloroform renewed. The case, however, continued to grow worse until ten o'clock, when death closed the scene.

Post-mortem Examination.—Brain and medulla free from congestion or effusion; kidneys highly injected. Here, I suppose, was one of those cases where, in consequence of the frequent swamping of the brain in venous blood, by the repeated recurrence of the convulsions, the medulla was at length no longer able to perform its function; the par vagum was paralyzed, and respiration suspended.

The use of the bromide of potassium in eclampsia is no doubt often highly advantageous; acting, in part, by calming reflex excitability, and also by diminishing the quantity of blood circulating in the brain. It seems particularly adapted to those cases where convulsions continue after delivery, and should then be employed in conjunction with a diligent search after, and removal of, exciting causes.

Both chloroform and chloral are articles of high value, and no doubt their action is altogether identical. The latter may be used by hypodermic injection, in some cases, where the patient can no longer swallow. But it has again and again been seen, that, although chloroform will subdue *pro tempore* the convulsive paroxysm, immediately on its withdrawal the convulsions will return; suggesting that their mode of action is to cut off the chain of connection between the morbid impression on the periphery and the nervous centres. They can only, therefore, be most useful after measures have been employed to protect the brain, and may be used for the purpose of holding the disease in check until the womb is emptied, the bowels cleared, and those other measures put in requisition which a knowledge of exciting causes will suggest.

Lastly, we should do injustice to this subject were we to close without saying a word about the use of opium, which is still employed by some physicians in the treatment of this disease. In the narcosis which this agent produces, the respiration is slow, the pulse full. The patient, while retaining with singular persistency his reflex sensibilities almost to the last, will die, sometimes, with convulsions. Turgescence of the vessels of the brain, with serous effusion into the base and ventricles (more rarely extravasation of blood), are the post-mortem appearances.

From the mere annunciation of these effects, it would seem that opium would be the very agent most certainly calculated to coincide with diseased action, and to hurry on the fatal catastrophe in eclampsia.

I have only seen one case, and that in consultation, where it had been employed: in that, both mother and child were lost. It was the practice much in vogue in this disease in the latter part of the last century, but was abandoned very generally, I presume, because of its unfortunate results. To revive it now would only be to repeat the sad experiences of our forefathers.

TWENTY-SECOND ANNUAL MEETING OF THE CLARKE COUNTY MEDICAL SOCIETY.

The above society met on Thursday, May 8th; Dr. J. H. Rodgers, first vice-president, in the chair.

Members present: Drs. Banwell, Bryant, Buckingham, Gillett, Harris, Hazzard, McNeill, Kay, Pollock, Reeves, Rice, J. H. Rodgers.

Dr. Hazzard brought before the society a patient affected with paralysis of the nerves of sensation belonging to the arms. The patient had been attacked daily with paroxysms, in which the symptoms were aggravated for a time, and the affection would extend to new portions of the body. This young man had been suffering from rheumatism. He was temperate in his habits, except in regard to the use of tobacco. He had used the electric battery with unsatisfactory results. The electricity made him feel as if he were being torn to pieces, and seemed to drive the disease over a still greater extent of the system. The loss of sensation was becoming more and more extended as time passed. The disease commenced with the most distant joints of the fingers, and gradually involved portions of the hands and arms nearer the body, until now it had reached the nerves of the upper part of the chest.

Remarks were made upon this case by Drs. Hazzard, Buckingham, Kay, Harris, and Bryant.

This being the annual meeting, the society then proceeded to the election of officers for the ensuing year. The election resulted as follows: President, Dr. J. H. Rodgers; 1st Vice-President, Dr. C. Pollock; 2d Vice-President, Dr. W. G. Bryant; Secretary, Dr. Isaac Kay; Treasurer, Dr. W. H. Reeves; Board of Censors, Drs. McLaughlin, R. Rodgers, Hazzard, Buckingham, and Harris.

Dr. Reeves offered his annual report showing the condition of the treasury. The report was received as satisfactory.

Dr. Bryant reported a case of paroxysmal nervous disease. Dr. Reeves reported a case of anomalous cerebral disease in a child. Dr. Harris reported a case of strangulated hernia occurring in a lady. These cases were thoroughly discussed by Drs. J. H. Rodgers, Bryant, Reeves, Hazzard, Harris, and McNeill.

The society adjourned, to meet again on the second Thursday in June next.

J. H. RODGERS, *President.*
ISAAC KAY, *Secretary.*

ABTRACTS OF SYRACUSE MEDICAL ASSOCIATION.

Dr. Benedict said that about five months ago he had a good many cases of articular rheumatism, and at this time noticed what he considered a rheumatic diathesis, a white velvety coat on the tongue being the most marked and uniform feature of all; and with this there seemed to be a greater amount of pain in all attacks, with great tolerance of opiates. People with this diathesis were not liable to bowel complaints; on the contrary, are costive. The secretions, when examined, generally proved to be acid.

CASE.—A young man employed in a drug-store was, on my first visit, struck with this diathesis, and treated him with reference to it. In a few days the heart became implicated and soon after the brain, and the patient died.

CASE.—The wife of a policeman was suddenly taken with a severe pain in the hip, which gradually extended down the limb. The pain was intensely severe. I gave her twenty grains acetate morphia and three hypodermic injections of a grain each in the first twenty-four hours.

The point I wish particularly to bring out is this: "Rheumatic diathesis," marked with a white velvety coat on the tongue, obstinate constipation, severe neuralgic pains, with great tolerance of opiates; and to ask if the cases of cerebro-spinal meningitis which we have had in the last eighteen months, were not more or less of this diathesis?

Dr. Terry related a case he had had, with white, velvety coat on tongue, and severe neuralgic pains, which he at first thought would eventuate in fever; but on following the case, found rheumatic tendency. The heart, on examination, gave distinct friction-murmurs. There was a good deal of neuralgia accompanying this.

All the members present agreed with Dr. Benedict, and had noticed repeatedly cases of this character; and that in nearly all cases in the last year or two, the pain, when present, seemed more severe than it used to be in similar cases, and that they had had to give much larger doses of anodynes to give relief; and the same in regard to the constipation, was more obstinate and required larger doses to remove. Dr. Terry referred to the treatment of rheumatism, saying that the alkaline treatment was generally relied upon.

Dr. Plant reported a case of supposed "black gangrene." The patient, an unmarried woman, aged about 25, complained that about last August the skin on her foot had turned black. She consulted a so-called doctor, who pronounced it black gangrene, and treated her for the same. This black condition had spread up to the knee; and when the case came to Dr. Plant, there were some black spots on her nose and face, and a few in her scalp. The limbs were of normal size, the patient healthy, but in a morbid state of mind. The epidermis was roughened as from rubbing. The black spots had rather a shining, metallic appearance. and proved to be produced by the application of stove-polish.

AMERICAN MEDICAL ASSOCIATION.

The twenty-fourth annual session convened in St. Louis, Mo., on Tuesday, May 6, 1873.

Dr. D. W. Yandell, of Kentucky, opened the session.

Rev. Dr. S. J. Nichols, of St. Louis, opened the proceedings with prayer.

An address of welcome to the delegates was made by Dr. J. S. Moore, on behalf of the Committee of Arrangements.

Dr. T. M. Logan, of California, president elect, was invited to preside.

Dr. J. B. Johnson, chairman of the Committee of Arrangements, made a few remarks, and presented the roll of delegates and members, as already registered for approval. (Four hundred and forty-eight members were registered during the session.)

Dr. Johnson announced the places of meeting for the sections, and the hours for holding the sessions, after which he presented the following programme, all of which was adopted:

Monday evening, there will be a *soirée musicale* at Mercantile Library Hall, commencing at 8 o'clock. A band has been engaged and arrangements made with Pezolt for refreshments. The wives and daughters of the physicians are expected to be present.

Tuesday evening, there will be held a *levee* at the residence of Col. J. L. D. Morrison, cor. of Locust street and Leffingwell avenne.

On Thursday evening, Dr. J. J. Woodward, U. S. A., of Washington, will, by especial request of the Committee of Arrangements, deliver the Toner lecture at Masonic Hall.

On Friday afternoon, the visitors will view Lafayette Park, Tower Grove, and Shaw's Garden. Carriages to leave the hall at two o'clock.

As there were some delegations contested, all these cases were at once referred to the Committee on Ethics.

The president announced as the Committee on Ethics for 1873: Drs. N. S. Davis, Illinois; E. L. Howard, Maryland; H. F. Askew, Delaware; D. W. Yandell, Kentucky; and J. M. Toner, District of Columbia.

The president then delivered the annual address, Vice-President Dr. B. H. Catlin, Connecticut, presiding.

On motion of Dr. W. Brodie, Michigan, thanks were tendered the president for his address, and it was referred to the Committee of Publication.

Dr. E. L. Howard, Maryland, offered his report of the Committee on Better Arrangements of the Sections, etc., which was made the special order for Wednesday at 10 o'clock.

Dr. J. J. Woodward, U. S. A., offered a paper on rank in the army, which was made the special order for Wednesday at 11 o'clock.

The Committee on Nomenclature of Diseases offered their report, which was made the special order for Thursday at 10 o'clock.

The report of the Committee on American Medical Necrology, was presented by the chairman, Dr. J. D. Jackson, Kentucky, and on motion was referred to the Committee of Publication.

The report of the Committee on Suggestions in Medical Education, Dr. A. M. Pollock, Penn., chairman, was offered and made the special order for Thursday at 11 o'clock.

Several voluntary communications were offered and referred to the appropriate sections.

On motion, it was agreed that the several States should report their members of the Committee on Nominations at the opening of the morning's session.

On motion, the association adjourned.

SECOND DAY.

The president called the association to order at 10 o'clock A. M.

The several States reported their members of the Nominating Committee as follows: Alabama, G. Moses; Arkansas, A. L. Breysacher; Connecticut, W. A. M. Wainwright; Delaware, H. F. Askew; District of Columbia, F. Howard; Georgia, J. P. Logan; Illinois, H. A. Johnson; Indiana, W. H. Meyers; Iowa, A. M. Carpenter; Kansas, D. W. Stormont; Kentucky, R. H. Gale; Maine, A. Garcelon; Maryland, S. P. Smith; Massachusetts, L. F. Warner; Michigan, W. Brodie; Minnesota, A. B. Stuart; Missouri, J. B. Johnson; Mississippi, J. W. M. Shattuck; New Hampshire, E. F. McQuestan; New Jersey, S. Lilly; New York, H. W. Dean; North Carolina, R. J. Hicks; Ohio, A. Dunlap; Pennsylvania, W. J. Asdale; Rhode Island, L. Morton; Tennessee, W. T. Briggs; Texas, D. R. Wallace; Virginia, F. D. Cunningham; West Virginia, G. Baird; Wisconsin, E. P. Russell; U. S. Army, B. A. Clements; U. S. Navy, C. Eversfield.

The Committee of Arrangements reported a number of additional delegates, members by invitation, and permanent members.

On motion of Dr. Davis, of Illinois, the list as read was approved, except the members by invitation, which list was referred to the committee for revision.

An invitation for the association to meet next year in Detroit was read and referred to the Nominating Committee.

Special business being in order, the report on Better Arrangement of the Sections was read by the chairman, Dr. E. L. Howard, of Maryland.

The committee suggested that all lengthy papers be referred to a sub-committee, to determine as to the advisability of bringing them before the sections. Each section to have a sub-committee for this special purpose.

Effective action was urged on the important subject of medical instruction. That all questions of a personal character, complaints, and on credentials, be referred to the Committee on Ethics without discussion. That the Committee on Ethics be constituted of not less than nine members, to be selected by the Nominating Committee, and to serve for three years. The following arrangement for sections was suggested in place of that now existing:

1. Practical medicine, materia medica, and physiology.
2. Obstetrics, and diseases of women and children.
3. Surgery and anatomy.
4. Medical jurisprudence, chemistry, and psychology.
5. State medicine and public hygiene.

The committee demand a more rigid examination of all papers offered for examination, and thus cut off all that are stale, loose, or verbose, and not calculated to reflect credit on the association.

A minority report was presented by Dr. Bronson, of Massachusetts, who objected to the suggestion about the Committee on Ethics. He wanted them to be appointed annually, instead of serving for three years.

On motion of Dr. Davis the report and accompanying resolutions, amending the constitution, except that relating to the Committee on Ethics, were unanimously adopted.

Dr. Davis offered as a substitute for the resolution on the Committee on Ethics, that a committee, known as the Judicial Council, be appointed, consisting of twenty-one members; seven elected for one, seven for two, and seven for three years, and annually thereafter seven members should be elected, to whom should be referred all matters of ethics, etc.

The substitute was unanimously adopted.

A letter from Dr. S. D. Gross, of Pennsylvania, was read, advocating certain amendments, and Dr. Davis then offered the following:

Resolved, That all relating to committees on medical education, medical literature, and climatology and epidemic diseases, be stricken out, in accordance with the amendment proposed by Dr. Gross in 1872, and add—

XII. *Addresses.* It shall be the duty of the nominating committee to appoint annually three members who shall deliver addresses before the association at the next annual meeting after their appointment—one on medicine, one on surgery, and one on obstetrics and diseases of women—no one address to occupy more than forty minutes.

After much discussion, on motion of Dr. E. L. Howard, the resolutions of Dr. Davis were laid upon the table.

On motion of Dr. Todd, of Kansas, the report of the committee and all the resolutions attached were adopted in full.

Dr. J. J. Woodward, U. S. A., then read a memorial from the medical officers of the army asking for increased rank, etc., and asking the aid of the association to procure what they desired.

On motion of Dr. J. M. Keller, Kentucky, it was

Resolved, That in the opinion of this association the rank of the medical officers of the army ought to be fully equal to that of officers of any other staff corps, or of the medical corps of the navy; that we learn with regret that this is not the case, and that we regard with grave disapproval the odious discrimination thus made against a meritorious body of officers.

Resolved, That we look upon the law which prohibits promotions and appointments in the medical corps of the army as unwise and unjust, and that in our opinion, it ought forthwith to be repealed.

Resolved, That a committee of five be appointed by the president to memoralize Congress on this subject, and that each member of this association pledges himself to use all his influence with the member of Congress from his own district in behalf of the objects of these resolutions.

Committee: Drs. J. M. Keller, Kentucky; H. F. Askew, Delaware; J. M. Toner, District of Columbia; J. A. Murphy, Ohio; and N. S. Davis, Illinois.

The report of the Committee on Medical Education was read by the chairman, Dr. John Carson, Ohio, and referred to the Committee of Publication.

The report on Medical Literature was read by Dr. L. P. Yandell, Jr., Kentucky, and similarly referred.

The reports of the Committee of Publication, of the treasurer, and of the librarian, were read and similarly referred.

Dr. J. M. Toner presented a large number of valuable statistics as to hospitals, medical societies, etc., in the United States, which were referred to the Committee of Publication with discretionary power.

The secretary read Dr. J. M. Da Costa's memorial on Dr. S. H.

Dickson, as ordered at the last session, and on motion, the resolution appended was adopted, and the memorial ordered to be spread upon the minutes.

Dr. John S. Moore, of St. Louis, chairman of the Committee on Prize Essays, announced that only one such production had been received, and it was not deemed worthy of any of the prizes offered.

The secretary read a list of names of those who had been appointed to represent the American Medical Association to the British Medical Association, and announced that the commission of delegates would be made out immediately.

The following named gentlemen compose the list: Drs. F. G. Smith, C. Wister, J. S. Cohen, of Philadelphia; Dr. E. Warren, of Baltimore; Dr. C. L. Ives, of New Haven; Dr. Edward Montgomery, of St. Louis; Drs. F. Barker, E. Seguin, and J. C. Hutchison, of New York; Paul F. Eve, Tennessee; J. A. Alexander, Virginia; C. J. O'Hagan, South Carolina.

The Committee on Nominations, through their chairman, Dr. J. B. Johnson, reported in part as follows:

Your committee suggest the following gentlemen for the various offices named:

President—Dr. J. M. Toner, District of Columbia.
First Vice-President—W. Y. Gadberry, of Mississippi.
Second Vice-President—J. M. Keller, of Kentucky.
Third Vice-President—N. C. Husted, of New York.
Fourth Vice-President—L. F. Warner, of Massachusetts.
Treasurer—Dr. Casper Wister, of Philadelphia.
Librarian—Wm. Lee.
Committee on Library—Johnson Elliott.
Assistant Secretary—Theodore A. McGraw, Detroit.

Committee on Arrangements—Dr. W. Brodie, chairman; James A. Brown, Morse Stewart, J. F. Noyes, E. W. Jenks, Henry F. Lyster, D. O. Farrard, Eugene Smith, all of Detroit.

Committee on Prize Essays—Drs. J. K. Johnson, A. Sager, H. Hitchcock, of Detroit; E. Andrews, of Illinois; E. S. Gaillard, Kentucky.

Committee on Publication—Drs. F. G. Smith, W. B. Atkinson, D. Murray Cheston, Pennsylvania; Wm. Lee, District of Columbia; Casper Wister, Pennsylvania; H. F. Askew, Delaware; Alfred Stille, Pennsylvania.

Detroit was named for the next annual meeting of the association.

This report was adopted by the association.

The treasurer of the association made a report, setting forth the fact that there was a balance in the treasury of only $496.76, owing to the heavy expense attending the publication of the proceedings of the last annual meeting.

At this point in the proceedings an invitation was received and accepted to visit the Missouri Institution of the Blind.

Dr. Davis, of Chicago, proposed an amendment to the constitution, as follows:

"The delegates shall receive their appointments from permanently organized state medical societies, and such county and district medical societies as are recognized by representation in their respective state societies, and from the medical department of the army and navy of the United States."

Also, "each state, county, and district society, entitled to representation, shall have the privilege of sending to the association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number. The medical staffs of the army and navy shall be entitled to four delegates each." Laid over.

Dr. Brodie, of Detroit, proposed that a committee of one from each State be appointed, whose duty it shall be to revise the code of ethics, and report at the next annual meeting; but, at the suggestion of Dr. Woodward, the subject was referred to the judicial council.

Dr. J. F. Matchett, Texas, offered a paper on yellow fever, etc., which was made the special order for 12 o'clock Thursday.

A paper by Surgeon A. L. Gihon, U. S. N., on medical education, was referred to the Committee on Medical Education.

Dr. Frederick Horner, Jr., U. S. N., offered a resolution that the American Medical Association appoint a committee of one member from each of the original thirteen States of the Union, to report to the Centennial Celebration, on the medical, surgical, and biographical literature of the period of 1776.

As a tribute to Joseph Warren, Benjamin Rush, Arthur Lee, General Hugh Mercer, and other noble and patriotic physicians, who aided to secure American independence, the resolution was adopted.

On motion of Dr. Peck, of Iowa, in view of the fact that the reports of the surgeon-general of the United States army, as exhibited in volumes one and two of the first part of the Medical and Surgical History of the War of the Rebellion, have received a too limited circulation by reason of an insufficient issue of the same by Congress, it was

Resolved, That the president and secretary of this association be directed to petition Congress at the next session in behalf of the profession, asking that the edition recently issued be reproduced in sufficient number to permit of general distribution to the members of the profession throughout the country.

Resolved, That the thanks of this association are due and are hereby tendered Congress for aiding thus far in developing and presenting to the profession the reports of the surgeon-general, as herein specified.

Resolved, That the thanks of this association are hereby tendered the officers of the United States army who have by sacrifice and labor been instrumental in placing before the profession the valuable information contained in volumes one and two of the first part of the Medical and Surgical History of the War of the Rebellion.

The association adjourned to meet on Thursday.

LEVEE AT THE RESIDENCE OF COLONEL MORRISON.

The members of the association were entertained on Tuesday evening at the elegant mansion of Colonel J. L. D. Morrisou, Locust street and Leffingwell avenue. There was a large and brilliant assemblage, and the honors were rendered by Colonel Morrison, Mrs. Morrison, and daughter, in a manner which made the affair a notable one.

THIRD DAY.

The president called the association to order at 10 o'clock. The secretary read the report of the Committee on Nomenclature, as follows:

In accordance with the resolutions appended to the minority report of the committee adopted by the association at its last meeting, one thousand extra copies of the proposed nomenclature were printed in pamphlet form and distributed to the profession and to the various medical journals, both at home and abroad; and such criticisms and suggestions as would represent their opinions as to its merits and fitness were invited from those receiving it. To this invitation not a single response has been made by medical journals, and but from two practitioners, the latter being such additions as in the judgment of these gentlemen would render the work more complete, but which, in the judgment of the majority, describe conditions which none but a specialist could recognize. From this statement of the results of a year's consideration of the proposed nomenclature, the conclusion may be drawn that the profession are satisfied with the work. Your committee are not willing to entertain the only other conclusion, that men of culture and practical men are indifferent upon a subject of such importance; they therefore again present the resolution appended to the majority report, and ask for its adoption:

Resolved, That the report of the committee on the nomenclature of diseases be referred to a special committee of five members, to be appointed by the president, who shall examine it and report upon its final disposition at the present meeting of the association.

Resolved, That, on the favorable report of such committee, it shall be referred back to the committee on the nomenclature of diseases, for the preparation of an index to be published with it, in the forthcoming volume of the transactions.

Dr. Atkinson, of Pennsylvania, moved the report be received and the resolutions be adopted.

Dr. Woodward, of the United States army, thought he could offer some good reason why the report should not be received, and went on to show the inferiority of the American system of nomenclature to that of the British association, copies of which had been sent to this country, and one of which he had personally presented to the Medical Association of New Orleans, where he had been induced to vote against its adoption. This step he had since regretted, for upon comparing the Philadelphia nomenclature, now in use in this country, with the English, though at first sight there did not appear to be much difference, it would be seen upon a careful review how far superior that of the Royal College of Physicians of England was to that now in use here, and it seemed to him that, as it was certainly advisable to have some nomenclature which should be recognized wherever the English language was spoken, it would be advisable, until some definite plan was adopted, for that of England to be used, there being so many grave faults in that of Philadelphia as to render its adoption inexpedient. He concluded by offering the following resolutions, which were adopted:

"*Resolved*, That, in the opinion of this association, it is inexpedient to adopt the nomenclature and classification presented by the majority of the committee on nomenclature at the meeting in Philadelphia.

"*Resolved*, That a committee of three be appointed by the president, whose duty it shall be to communicate the foregoing resolution to the proper committee of the Royal College of Physicians of London, and to negotiate for the representation of the American Medical Association in the first decennial revision of their nomenclature."

The resolutions of Dr. Woodward were adopted. Committee: Drs. Woodward, Edward Jarvis, Massachusetts; A. Stille, Philadelphia.

The Committee of Arrangements reported the following physicians for election as permanent members: Edward Stewart, Mendon, Mich.; G. L. Polk, Æola, Ill.; J. W. Hollowbush, Warsaw, Ill.; John Shore, St. Louis; A. Goodenough, Idaho City; Daniel Lichty, Rochelle, Ill.; B. F. Edwards, Kirkwood, Mo.; L. A. Grimes, Concordia, Ill.; C. W. Crary, St. Louis; S. T. Newman, St. Louis; George F. Center, Olney, Ill.; J. E. Faper, Charles F. Ludwig, St. Louis , Dr. Randall, Warren county, Ill.; W. W. Vinnedge, Lafayette, Ind.; R. J. Mitchell, Lewis Wilcox, R. J. Allmond, W. C. Day, R. S. Cowan, and Edward Blakesley, Ill.

On motion of Dr. Davis, of Illinois, they were unanimously elected.

The president read a letter from Dr. H. R. Storer, now residing at Mentone, on the Mediterranean, for the benefit of his health, who had been giving his attention to the subject of climatology, asking that he might be appointed on a committee to inquire into and make a report on the relative advantages of American and foreign water-cures, which was referred to the Committee on Nominations.

On motion of Dr. Toner, it was

"*Resolved*, That, in the opinion of this association, it would be an opportune occasion, at the Centennial Celebration of 1876, for holding an International Medical Congress, to consider, and if practicable adopt, a uniform classification and nomenclature of diseases, to be used by the profession throughout the world."

Dr. Davis read the report of the unfinished business of the Committee on Ethics of last year, as follows:

"Dr. de Marmon held credentials as a regular delegate from the Westchester County Medical Society, in New York, to the meeting of the association in 1872. But at that meeting a protest against his admission was made, on the ground that he was on trial for unprofessional conduct in his local society. The subject was referred to this committee at so late a period of the meeting that it could not then be acted upon. From the evidence recently presented to our committee, it appears that the trial of Dr. de Marmon is still unfinished in the Westchester County Medical Society; that said society has formally withdrawn his credentials as delegate to this association, and consequently no present action in the matter is required by this association.

"At a meeting of the association in Philadelphia, May, 1872, objections were made to the admission of delegates from the Pathological Society of Berks County, Penn., on the ground of non-professional conduct on the part of many of the members of that society. Time not permitting a full hearing of the case during that meeting of the association, a report on it was postponed until the next meeting of the association. In the meantime the accused parties were duly notified of the charges and requested to make answer thereto. After a full investigation of the case, your committee on ethics, appointed in 1872, declare a sufficient number of the charges sustained to justify the recommendation that the said society be not allowed a representation in this association."

After some remarks by several members, the report was adopted.

A report was presented by Dr. Davis, the chairman of the committee appointed last year to consider the question of the secretary's salary, recommending that no specified sum be fixed as his remuneration, as they would be unable to retain the services of so able a secretary as Dr. Atkinson, because, while the office was now comparatively honorary, members could not demand as a right such attentions as they would expect if the secretary were in receipt of a fixed salary; besides, the funds at the disposal of the association were not sufficient to enable them to offer sufficient remuneration to Dr. Atkinson to induce him to give so much of his time to the duties as the demands of members would exact from him; they therefore thought it would be better to name no specific sum, thus leaving the secretary in a comparatively independent position in his relations to the association.

It was finally agreed that the report be adopted, and that the sum of five hundred dollars be given the secretary as an honorarium, provided that said amount be left in the treasury after defraying the expenses of publishing the transactions, etc.

Dr. A. N. Bell, of Brooklyn, New York, offered the following resolutions:

Resolved, That in the judgment of this association, the establishment of a National Sanitary Bureau, with relations to the general government similar to those of the bureaus of agriculture and education, is highly desirable as a means of promoting sanitary science and the protection of the public health.

Resolved, That this association request the United States Educational Bureau to so extend the scope of its inquiry as to include vital diseases and mortuary statistics in relation to local, meteorological and geological influences, and to disseminate the information so collected throughout the country.

Considerable discussion ensued, and the resolutions were finally adopted, and referred to the Committee on Public Hygiene and State Medicine.

The chairman called up the special order set for 11 o'clock, and Dr. Pollock, of Pittsburg, Pennsylvania, presented the report on Medical Education, as follows:

"The committee appointed by the president at the last meeting of the association, to take into consideration the propriety of adopting the suggestions of the committee on medical education, are fully impressed with the importance of the subject, and acknowledge the value of the suggestions offered. But we believe it wholly impracticable to carry into operation any law which does not meet the hearty approval of the diverse interests connected with the teaching and practice of medicine; and while we have no doubt that this association has grown to be a power in the profession, felt and recognized by all, yet to make its power effective, its decisions should be calm and deliberate. Therefore your committee, after due deliberation, have concluded to recommend the adoption of the conclusion of the report of the committee on medical education, which is as follows: 'That a congress composed of two members from each state and territory, and one from each recognized medical college, all to be members of this association, be appointed (or nominated by the nominating committee) at this present session; that said committee or congress shall meet three days previous to our next annual meeting, and that said committee or congress shall perfect a plan for some uniform system of medical teaching, which, when adopted by the association, shall be the only recognized method of medical teaching in the United States.'"

After a long and animated debate, during which the report was approved and reconsidered, it was finally laid on the table.

Dr. W. M. McPheeters, of St. Louis, brought forward the proposed amendment to the constitution presented last year, by which it was sought to place the United States marine hospitals in the same relative position in the medical association as the medical departments of the army and navy, and it was laid over till the next annual meeting.

Dr. Davis, on behalf of the committee appointed to devise and recommend some plan for securing a more complete report of the doings in the several sections, submitted the following resolutions, which were adopted:

Resolved, That the committee of arrangements for each annual meeting of the association are instructed to secure the services of a sufficient number of phonographic reporters, to have one in attendance on the regular sessions of each of the sections in the afternoon, as well as during the general morning sessions. That the reports thus obtained be printed the same evening, on slips or proof-sheets, in sufficient number to supply all the members of the association in attendance early the following morning.

The second resolution provides for the method of providing for the expenses hereby incurred. The third resolution provides for the selection and revision of the most valuable parts of the proceedings, and their transmission to the secretary for publication within twenty days after the adjournment of the association.

On motion of Dr. R. M. Bertolet, of Pennsylvania, it was

Resolved, That the president appoint a committee of three to report at the next annual meeting upon the progress of Otology.

Committee: Drs. D. B. St. John Roosa, New York; Bertolet, Pennsylvania; and S. Sexton, New York.

On motion of Dr. Howard, Maryland, it was resolved that the chairmen of the several sections shall have free scope in the selection of subjects for addresses.

A motion by Dr. Keller, of Kentucky, to change the name of Judicial Council to Medical Senate was lost by a close vote.

Dr. J. J. W. Angear, of Iowa, offered the following resolution, which was carried by acclamation:

"*Resolved*, That we hereby tender our sincere thanks to Colonel and Mrs. J. L. D. Morrison, for the hospitality extended to and so greatly enjoyed by this association last evening."

A member introduced a resolution pledging the association, individually and collectively, to discontinue the use of alcoholic stimulants in prescriptions and as beverages, which was most emphatically ruled out of order, the same resolution having been presented last year, when a too free use of alcohol had been pronounced against.

The time for the next annual meeting, in Detroit, was fixed for the first Tuesday in June, May being considered too cold a month.

Dr. Davis made a suggestion affecting the utility of the meetings of the sections and the convenience of delegates wishing to attend them. He referred to the want of space and facilities for the proper attention being given to these matters, and the slim attendance which had been the result, and expressed the hope that better arrangements would be made at Detroit in this respect than they had found hitherto.

The paper on yellow fever, presented on Wednesday, was referred to the Committee on Practice of Medicine.

Dr. E. L. Howard offered the following amendment, which was laid over until the next annual meeting:

"*Resolved*, That article 4 of the constitution be amended as follows: Strike out second clause of first paragraph and insert, 'They shall be nominated by the judicial council, and shall be elected by vote on a general ticket.'"

Dr. Johnson, chairman of the Committee on Nominations, then presented the following report on nominations for chairmen and secretaries of sections for 1874:

1. Practice of Medicine, Materia Medica, and Physiology—Dr. N. S. Davis, of Chicago, chairman, and Dr. Frothingham, of Ann Arbor, Michigan, secretary.

2. Obstetrics and Diseases of Women and Children—Dr. Theodore Parvin, of Indianapolis, chairman, and Dr. Montrose A. Pallen, of St. Louis, secretary.

3. Surgery and Anatomy—Dr. S. D. Gross, of Philadelphia, chairman, and Dr. Alonzo Garcelon, of Maine, secretary.

4. Medical Jurisprudence, Chemistry, and Psychology—Dr. A. N. Tally, of South Carolina, chairman, and Dr. E. L. Howard, of Maryland, secretary.

State and Public Hygiene—Dr. A. N. Bell, of Brooklyn, chairman, and Dr. A. B. Stuart, of Winona, Minnesota, secretary; F. A. Ross, Alabama; D. A. Linthicum, Arkansas; T. M. Logan, California; R. G. Buckingham, Colorado; B. H. Catlin, Connecticut; L. P.

Bush, Delaware; F. Howard, District of Columbia; W. F. Westmoreland, Georgia; H. A. Johnson, Illinois; W. H. Myers, Indiana; J. J. Angear, Iowa; D. W. Stormont, Kansas; L. Rodgers, Kentucky; S. Fitch, Maine; H. I. Bowditch, Massachusetts; R. C. Kedzie, Michigan; A. B. Stuart, Minnesota; J. W. M. Shattuck, Mississippi; John T. Hodgen, Missouri; J. H. Parsons, New Hampshire; E. M. Hunt, New Jersey; A. N. Bell, New York; W. A. B. Norcom, North Carolina; William Clendenin, Ohio; A. M. Pollock, Pennsylvania; G. M. Lenore, Rhode Island; R. A. Kenlock, South Carolina; W. T. Briggs, Tennessee; D. R. Wallace, Texas; J. L. Caball, Virginia; James Brownfield, West Virginia; H. B. Strong, Wisconsin; A. F. Woodward, Vermont; S. M. Bemis, Louisiana.

Resolved, That the secretary of the association be authorized to fill up all vacancies in the committee from the states and territories.

Also, that Dr. A. N. Bell, New York, be president, and Dr. A. B. Stuart, Minnesota, secretary.

Committee on Necrology—Chairman, Dr. A. Sager, Ann Arbor, Michigan, and committee remain same as last year, excepting Dr. Alonzo Garcelon, of Maine, in place of Dr. McRuer, deceased; Dr. W. McCabe, Kansas; J. W. H. Baker, Iowa; J .H. Wheeler, New Hampshire; Dr. Milligan, Minnesota; W. M. Chambers, Illinois; G. Sutton, Indiana; A. J. Lands, Georgia; A. B. Vaughn, Mississippi; George Mitchell, Ohio; J. J. Woodward, U. S. A.; N. M. Dodson, Wisconsin; L. P. Yandell, Sen., Kentucky.

Judicial Council—Three years—Dr. W. Brodie, Michigan; N. S. Davis, Illinois; E. L. Howard, Maryland; William O. Baldwin, Alabama; H. W. Dean, New York; J. P. Logan, Georgia.

Two years—L. S. Joynes, Virginia; R. N. Todd, Indiana; H. F. Askew, Delaware; J. E. Morgan, District of Columbia; Daniel Little, New Jersey; S. M. Benham, Pennsylvania; A. Dunlap, Connecticut.

One year—Dr. J. K. Bartlett, Wisconsin; Powell, Illinois; Gale, Kentucky; Moses, Missouri; Hughes, Iowa; Bemis, Louisiana; Cheever, Massachusetts.

Dr. R. R. Storer was appointed chairman of a committee to report on American as compared with foreign water-cures.

The report was adopted.

On motion, the association adjourned.

LECTURE ON CANCER.

In the evening the Toner lecture was delivered at Masonic Hall, by Dr. J. J. Woodward, United States army, on cancer and cancerous growths, in which he traced the history of the researches and discoveries in this branch of medical and surgical science, and the various opinions which have been entertained by the great authorities upon the subject during the past two centuries, and then passed on to give an outline of the structure and nature of such formation.

In giving his own experience, he expressed his dissent from some of the principles and opinions held by many prominent writers on cancerous growths, and in a most elaborate and erudite discourse, illustrated by photographs of sections of cancers which had come under his own treatment, proceeded to support his views.

The illustrations were by photo-micrographs, magnified to from 2,000 to 5,000 times the natural size of the objects, exhibited by means of A. S. Aloe's admirable apparatus.

FOURTH DAY.

President called the association to order at 10 A. M.

On motion of Dr. Davis, the vote by which the report of the Committee on Nominations on State Board of Health was adopted, was reconsidered.

On motion of Dr. Davis, the whole subject was recommitted to the Committee on Nominations.

On motion, Dr. W. F. Peck, of Iowa, was appointed a special committee to report on railroad injuries, and Dr. P. J. Farnsworth, of Iowa, on the therapeutics of ammonia.

Dr. A. S. Maxwell, of Iowa, offered the following amendment to the constitution:

"*Resolved*, That in view of the many and important duties imposed upon the Nominating Committee of this association by resolutions adopted at this session, the Medical Society of each State and Territory that elects delegates be requested, when selecting delegates, to nominate one member of such delegation as their member of the Nominating Committee, and also designate the mode of filling vacancies." Laid over.

The following amendment was offered by Dr. A. M. Pollock, of Pennsylvania, and laid over until the next meeting:

"*Resolved*, That in article 6 of the constitution, line four, the word 'five' be stricken out and the word 'ten' be inserted. It will then read, 'funds may be obtained by an equal assessment of not more than $10 annually on each of the delegates and permanent members,' etc. And in by-laws, article 5, line one, strike out the word 'five' and insert the word 'ten,' when it will read, 'the sum of $10 shall be assessed annually upon each delegate to the sessions of the association, as well as upon each of its permanent members,' etc."

A resolution on intemperance was presented by Dr. H. H. Middelkamp, of Warrenton, Mo., but it was tabled.

A resolution on liquors and patent medicines, submitted by Dr. Matchett, of Texas, was also tabled.

Dr. S. S. Bond, of Washington, D. C., who was suspended last year as in arrears in his local society, was reinstated by a vote of the association, he being restored to membership in his local society.

Dr. Davis then read the following majority report on ethics:

"The majority of the Committee on Ethics, in respect to the protest of the St. Louis Medical Society against the registration of Dr. Adam Hammer, of St. Louis, as a permanent member of this association, respectfully reports:

"That, after due investigation and the hearing of both parties, it appears that about a year since Dr. Adam Hammer was regularly arraigned and tried by the St. Louis Medical Society, of which he was a member, on the charge of violating the code of ethics. After an apparently full investigation he was declared guilty of the charges, and at a subsequent meeting he was suspended from membership for five years and until reinstated by a vote of the society. From this decision of the society the suspended member appealed to a civil court for legal process to compel the society to reinstate him. The judge of the court decided that the charter of the society gave it no authority to take cognizance of any personal assaults or controversies between its members, and issued a peremptory mandamus requiring the society to rescind its vote suspending Dr. Hammer, and to restore him to his rights of membership. Under this compulsory legal restoration to membership in the St. Louis Medical Society, Dr. Hammer claims the right to be registered as a permanent member at this meeting of the association. After due consideration it appears clear to a majority of the members of your committee that the mandamus of the circuit court has no other effect than simply to prevent the St. Louis Medical Society from enforcing any penalty against one of its convicted members, and does not in any degree affect the fact that he still stands convicted of having violated an important provision in the code of ethics. The constitution of this association, in the clause defining who shall be permanent members, states, 'that permanent members shall consist of all those who have served in the capacity of delegates, and of such other members as may receive the appointment by unanimous vote, and shall continue such so long as they remain in good standing in the body from which they were sent as delegates.' Inasmuch as Dr. Adam Hammer still stands convicted of a violation of the code of ethics by the St. Louis Medical Society, and said society is restrained from inflicting the penalty it has adjudged proper for the offense, solely by the interference of a civil court, it can not be claimed that he remains in good standing in that society. Therefore, your committee is of the opinion that he ought not to be received as a permanent member of this association at its present meeting.

" D. W. YANDELL,
" N. S. DAVIS,
" H. F. ASKEW."

MINORITY REPORT.

After the reading of this report, the minority report was presented as follows:

" The undersigned reluctantly dissents from the report of the majority of the Committee on Ethics, in the case of Dr. Hammer, on the following grounds:

" The only question before the committee is, Shall Dr. Hammer be permitted to register as a permanent member? The constitution of this association says: 'The permanent members shall consist of all those who have served in the capacity of delegates, and of such other members as may receive the appointment by unanimous vote, and shall continue such so long as they remain in good standing in the body from which they were sent as delegates, and comply with the requirements of the by-laws of the association.'

" It appears that Dr. Hammer is still a member of the St. Louis Medical Society, with all the rights and privileges of any other member of that body. The undersigned holds that the committee have no right to examine the case beyond this record, and therefore move:

"That the name of Dr. Hammer be ordered entered as a permanent member of this association.

[Signed,] E. LOYD HOWARD."

The majority report was adopted by a large majority.

The sections on psychology, etc., practice of medicine, etc., surgery, etc., materia medica, etc., and meteorology, etc., reported their minutes, which were, on motion, referred to the Committee of Publication.

On motion of Dr. Atkinson, inasmuch as Dr. Cheever was not a member of the association, his name was removed from the list of the Judicial Council, and that of Dr. J. R. Bronson, of Massachusetts, substituted.

Dr. J. R. Bronson submitted the following:

The American Medical Association, now about to adjourn, would prove derelict in duty and appreciation did it not honor itself by an acknowledgment of the obligations under which it has been placed by the profession, the Committee of Arrangements, the press, Col. Morrison, Henry Shaw, Esq., and other citizens of St. Louis; to Dr. Woodward, U. S. A., for the elaborate scientific dissertation delivered last evening under the auspices of the Toner fund, by Dr. Toner, of the District of Columbia, for initiating a lecture course of scientific character; and last, but not least, to the President and other officers of this association, for the dignified character and impartial manner in which they have performed the functions of their offices; therefore,

Resolved, That the thanks of this association be extended to each and all of the aforesaid, and this vote be placed upon our minutes.

Adopted.

Dr. Frederick Horner, Jr., U. S. N., after a short, but earnest speech in favor of the cause of temperance, offered the following resolutions:

ALCOHOLIC STIMULANTS.

Resolved, That in view of the alarming prevalence and ill-effects of intemperance, with which none are so familiar as members of the medical profession, and which have called forth from eminent English physicians the voice of warning to the people of Great Britain concerning the use of alcoholic beverages, we, the undersigned members of the medical profession of the United States, unite in the declaration that we believe that alcohol should be classed with other powerful drugs; that when prescribed medicinally it should be done with conscientious caution and a sense of great responsibility.

Resolved, We are of the opinion that the use of alcoholic liquors as a beverage is productive of a large amount of physical and mental diseases; that it entails diseased appetites and enfeebled constitutions upon offspring, and that it is the cause of a large percentage of the crime and pauperism of our large cities and country.

Resolved, That we would welcome any change in public sentiment that would confine the use of intoxicating liquors to the uses of science, art, and medicine.

On motion of Dr. Spottswood, of Virginia, they were referred to the Committee on State Medicine and Public Hygiene.

The secretary announced that Dr. E. W. Gray, of Bloomington, Ill., would read a paper next year on the relation of physiology to the practice of medicine.

The following final report was submitted by the Committee on Nominations, through Dr. Garcelon, of Maine, and adopted:

The committee recommend that the nomination of the committee from the thirteenth original States be deferred to the next annual meeting of the association. The committee request the convention to reconsider its action in the appointment of Dr. Myers, of Indiana, as a member of the Committee on Hygiene and State Medicine, and that the name of Dr. James F. Hibbard, of Indiana, be substituted. The committee also nominated Dr. W. O. Smith, of Newport, Kentucky, as chairman of a special committee on Puerperal Fever.

On motion of Dr. Yandell, of Kentucky, the selection of chairman and secretary of the Judicial Council was left to that body.

Dr. Davis then moved an adjournment.

President Logan, before putting the motion, made the following

FAREWELL ADDRESS.

GENTLEMEN: Our labors are now brought to a close. Our official relations herewith close. While thanking you for the kindness and courtesy extended to me, I avail myself of this opportunity to acknowledge the great compliment tendered, not to myself alone, but to that far distant land I represent, on the western confines of the glorious republic. [Applause.] In the name, therefore, of California and of Oregon, I return you my best thanks for the kind consideration received at your hands, not only on this occasion, but for the distinction of the presidency bestowed upon me last year, in the very cradle of American medicine. Proud and thankful as I am for this favor, I am still more thankful for it, when I reflect upon the indirect influence it has exercised upon the profession of the Pacific coast, for which the compliment was obviously intended. Not for any individual merits of my own, but for the common efforts of our medical men in giving you a grateful welcome, was the post of honor awarded to California. Prior to your advent there, the medical mind was in a state of inertia, the profession in a chaotic condition. The State Medical Society was in the fourteenth year of a Rip Van Winkle sleep. But no sooner were the clarion notes of your coming sounded, than a new spirit was awakened, and from their sheltering privacy, in all parts of California, volunteers poured in and threw themselves into the movement which was to regenerate the prostrated glory of their calling. [Applause.] How well they have succeeded, let their works and not my words tell. I have only to say that such were the high character and acknowledged merits of the papers read at the first annual meeting of their *renaissance*, that the legislature made forthwith an appropriation for their annual publication. Thus recognized and indorsed by the state, the Society has continued to advance to a higher and higher plane at each successive meeting. So complete has been our success in elevating the profession in California, that at the last meeting some four weeks ago, we were not only honored, for the first time in the medical history of our State, with a bounteous reception from the Governor, but also the President of the University left the seat of learning, one hundred and twenty miles distant from the capital, to address us on the subject of medical education, and, with our honored governor, graced our festive board. Appreciated as we now are by the State, we will continue our endeavors to add a luster to the high trusts that have been so generously confided to us, and to render ourselves more and more worthy of the next visit you may in your judgment think fit to accord to California. Grant that it may be soon. I now declare the twenty-fourth annual session of the American Medical Association adjourned.

The association then adjourned, to meet on the first Tuesday in June, 1874, at Detroit, Michigan.

Pharmaceutical.

CINCINNATI COLLEGE OF PHARMACY.

J. F. JUDGE, E. S. WAYNE, F. L. EATON,
Editing Committee.

At the meeting of the College, May 13, after the transaction of the usual current business of the association, Prof. J. F. Judge presented a specimen of carbazotate of ammonium, beautifully crystallized, of his own manufacture, and called attention to the fact that Dr. Dujardin-Beaumetz, of Paris, had used this salt in treatment of intermittent fevers, with success, even when quinia and the other remedies usually resorted to had failed to effect a cure. Other physicians have been using the remedy; and so far the results appear to support the conclusions of Dr. Dujardin-Beaumetz, —that it is a valuable medicine in obstinate cases of ague. The dose is one-sixth to one-half grain, and the whole quantity required to effect a cure is only from five to seven grains. Being quite bitter, it is best given in pill form.

Liquor Picis Alkalinus.—The following formula was suggested by Dr. H. D. Bulkley, of New York, for preparing a lotion to be used in place of a French proprietary tar preparation of some repute:

Take of tar........................2 drachms,
" Caustic potassa.......1 "
" Water....................5 fluid drachms.

Mix and dissolve, for external use.

This lotion mixes easily with water, and only moderately discolors the skin. After it dries, there remains very little of the tarry stickiness. Dr. B. claims that the caustic alkali united to the tar is more valuable than the latter alone as an anti-pruritic. The solution has been used with advantage in eczema, in chronic as well as in more acute forms. He considers it the best form for the external use of tar.

The Pharmacy Bill.—The General Assembly of Ohio, at its late session, passed a bill to regulate the practice of pharmacy, in the city of Cincinnati. It is too early to say anything positively in regard to its practical results; but we can say that it appears well calculated in its provisions to promote a more healthy condition in the pharmaceutical profession. It is clear to us that incompetent men should be prevented from engaging in pharmacy. If the bill will give us the assurance of greater qualification in the future than we have had in the past, in those devoting their attentions to the pharmaceutic art, then surely such legislation will prove to be of great value to the people and the physician.

Section 1 provides, "that from and after the passage of this act, it shall be unlawful for any person to open or conduct any retail drug, or chemical store, as proprietor or manager thereof, or engage in the occupation of compounding or dispensing medicines on prescriptions of physicians, or of selling at retail drugs, chemicals, poisons, pharmaceutical preparations, or other medicines within the corporate limits of 'Cincinnati,' until he shall have complied with the provisions of this act."

Section 2 provides for the appointment of three competent pharmacists to constitute the "PHARMACEUTICAL EXAMINING BOARD OF THE CITY OF CINCINNATI."

Section 3 provides that the examining board shall keep a *book of registration*, open at some convenient place, of which notice shall be given in two newspapers of general circulation. That within thirty days after notice, all persons engaged in the retail drug or apothecary business, etc., shall appear before said board for registration.

Section 4 provides that the examining board shall examine every person who shall desire to carry on or engage in the business of a retail apothecary, or that of retailing drugs, chemicals, poisons, or other medicines, or compounding or dispensing of the prescriptions of physicians, touching his competency and qualification for that purpose. On the approval of a majority of the board he is entitled to certificate of registration.

Section 5. That the provisions of section four of this act shall not apply to any person who shall be engaged in the retail drug and apothecary's business, as the proprietor of the same in said city, at the time of the passage of this act, or who shall hold the diploma of an incorporated college of pharmacy, whose diploma is granted and based upon a regular and previous term of service in the drug and apothecary business in addition to the instructions received in said college.

Section 6 provides that no person not a qualified assistant shall be allowed by the proprietor or manager of any store, to compound or dispense the prescriptions of physicians (except as an aid under the immediate supervision of said proprietor or his qualified assistant), unless he has been at least two years apprenticed in a store where prescriptions of physicians are compounded and dispensed, and has attended one full course of lectures in chemistry, materia medica, and pharmacy.

Section 7 explains that a qualified assistant, in the meaning of this act, shall be a *graduate* in pharmacy, as provided in section 5, or shall have been examined by the board, as provided in section 4.

Section 8 provides a fine of one hundred dollars for each and every week that parties liable to registration neglect the same after the expiration of the thirty days subsequent to the official notice provided for in section 3. It also provides a fine of like amount in certain cases for violations of section 6.

Section 9. This act shall take effect and be in force from and after its passage.

Penfold on the Treatment of Collapse by Injection of Ammonia into the Veins.—Mr. Oliver Penfold, Surgeon to the Bendigo Hospital, relates in the *Australian Medical Journal* for January, 1873, a case of extreme collapse following severe purging. The patient was lying on a bed; his eyes were sunken; his skin pale, cold, and clammy; the pulse was just perceptible by the most careful manipulation. He was hardly able to articulate above a whisper; indeed, he was rapidly dying. Strong stimulants, mustard poultices, and the external application of heat, were tried without effect.

"After waiting for an hour," Mr. Penfold says, "finding there was no improvement in his condition, and believing that in a few minutes he would be dead, and in spite of his friends' remonstrances to 'let him die quiet,' I injected 20 minims of a mixture of the strongest solution of ammonia with three times its volume of water into the left radial vein and connective tissue (into the latter by accident from want of sufficient assistance). In a few moments I thought the pulse was a little improved, and repeated the injection. After a short interval the man opened his eyes and tried to push away the syringe inserted in the vein with his right hand, and said, 'Dash it, leave off,' in a moaning sort of way. From that instant he began to recover, and was able to take a little beef-tea and brandy in the afternoon."

Selections.

Recent Views on Anæsthetics: Their Mortality, and Mode of Administration. II.—*Lister, Clover, Squarey, and others on the Mode of Administering Chloroform.*—An attempt is made to reconcile the discrepancies in the opinions of authorities by the want of experience, by the mode of administration of the anæsthetic, by the kind of inhaler, by the neglect of the pulse as an indication of danger; or, on the other hand, of the respiration, and so on.

Mr. Lister, in "Holmes' System of Surgery," believes that the notion that extensive experience is required for the administration of chloroform is quite erroneous, and does great harm by weakening the confidence of the profession in this invaluable agent, and limiting the diffusion of its benefits. Dr. Poore (*Lancet*, October 12, 1872) considers that the anæsthetics are by far the most potent class of drugs with which the medical practitioner has to deal. Their employment is fraught with imminent danger in the hands of the ignorant, and may bring death to the patient and disgrace to the doctor. This gentleman believes in "the necessity of giving students proper and systematic instruction in the management of this highly dangerous class of medicines. No man, he says, can be a good anæsthetist without practice. Every qualified medical man should be able to bring to the task that confidence and fearlessness which habit alone can give." Mr. Lister ("Holmes' System of Surgery") gives some simple instructions, which, he says, "may be acted on without difficulty by any intelligent medical man." He says, "Preliminary examination of the heart is never thought of, and during the inhalation the pulse is entirely disregarded; but vigilant attention is kept upon the respiration, and in case of its obstruction, firm traction upon the tongue is promptly resorted to." Dr. Squarey ("Administration of Chloroform and Nitrous Oxide," Walton: London), thinks that Mr. Lister is so far right, and believes that deaths from chloroform in the manner described by Mr. Lister do occur, and says that in his experience the pulse does not give much sign of danger till after those given by the respiratory system; yet he believes that cases of death occur in which the pulse ceases before respiration, and quotes cases of threatened death in point. He therefore advises that the pulse should always be carefully watched, as in cases of this kind the only chance of saving the patient depends on this cessation of the pulse being at once recognized, and means immediately taken to restore the circulation. Mr. Warrington Haward, who has given chloroform to more than 1,300 persons, disagrees with Mr. Lister in his advice to disregard the pulse, and says that he has not infrequently had indications of danger from the pulse, which could not have been obtained from the respiration. (*Medico-Chirurgical Transactions*, vol. liv.)

Mr. Clover, the most experienced living anæsthetist, thinks (*British Medical Journal*, July 29, 1871), that it is necessary to observe the pulse. Dr. Poore (*Lancet*, October 26, 1872) thinks that the respirations is of more importance than the pulse, but that the pulse is by no means to be neglected.

Dr. Sansom (*British Medical Journal*, April 12, 1873) believes that the chief mode by which the anæsthetic accomplishes its fatal effect, is by paralyzing the heart. Dr. Thomas Green, of Bristol (*British Medical Journal*, May 25, 1872), expresses the strongest dissent from the doctrines of Mr. Lister. Referring to disregarding the pulse he says, "Mr. Lister's teaching is more than a serious mistake: in practice it will be found a fatal error."

Regarding the various means of producing chloroform anæsthesia, the same amount of dispute occurs.

Mr. Lister (*British Medical Journal*, July 29, 1871) recommends a folded towel as the simplest and safest means of administering chloroform; and he holds that when this is used, the respiration becomes obstructed before the circulation fails, and that circumstances occasionally arise in which the patient's life will be placed in imminent jeopardy, unless the obstruction be cleared away by firm traction upon the tongue; and, further, that as this interference with the breathing may occur in a very insidious manner, it is wisest for the administrator to keep his attention riveted upon the respiration, rather than have it distracted by simultaneous observation of the pulse.

Dr. Sansom (*British Medical Journal*, April 2, 1873) believes that Mr. Lister, in coming to the conclusion that the towel is the best means of administering chloroform, has been victimized by imperfect experimentation, and that the method is most dangerous.

Mr. Clover, again, regards the folded towel as a dangerous means of administration in comparison with an inhaling apparatus devised by him some years ago. He describes (*Lançet*, November 9,

1872) his mode of administering the anæsthetic. He never gives more than 3¼ minims of chloroform in 100 cubic inches of air, and watches the pulse with even greater vigilance than the breathing, a plan which he has advocated and practiced for many years. He says (*British Medical Journal*, July 8, 1871), "I have administered chloroform more than seven thousand times," and other anæsthetics in four thousand other cases. "For several years I gave chloroform upon lint held at a distance from the face, but covered over with a towel, but I found it impossible always to prevent the patient from inhaling more than I desired." Dr. Poore (*Lancet*, October 26, 1872) says that "with Clover's apparatus you can be absolutely sure that you are not giving your patient a dangerously concentrated atmosphere of chloroform; but I must warn you that in the hands of a careless person it is quite capable of killing, and that, when using it, you must watch your patient as constantly and as carefully as if no inhaler were being used." Dr. Squarey ("Administration of Chloroform and Nitrous Oxide") says that Clover's instrument is the only inhaler which practically fulfills the one requirement, namely, the power of regulating the percentage of chloroform and air inhaled, necessary for safe use. Mr. Lister, on the other hand (*British Medical Journal*, January 29, 1871), says, "I have been accustomed to regard Mr. Clover's apparatus as in his hands a harmless luxury," and states his opinion that Mr. Clover's bag and mouth-piece are a cumbrous means of effecting chloroform anæsthesia. Dr. Skinner, of Liverpool (*British Medical Journal*, March 28, 1873), enters a "decided protest" against the "disgusting" practice of using inhalers, his own excepted, in which the same mouth-piece and apparatus are applied indiscriminately to all. His own apparatus is, he says, simple; and as it is supplied with two or more flannel covers, there is no excuse for using it to two persons in succession without a perfectly clean inhaler each time. Dr. Squarey believes that, next to Clover's apparatus, a piece of lint is the best medium for administering chloroform. Dr. Poore (*Lancet*, October 26, 1872) says, "If you have not got Clover's instrument, use a napkin, or a piece of lint." Mr. Lister believes that he has shown that the amount of chloroform given off from a folded towel on which a drachm and a half had been poured, held close above the face, was not more than enough to form an atmosphere containing 4½ per cent. of chloroform.

Dr. Sansom says that his experiments "tend to show that the percentage of chloroform-vapor capable of being inspired when the anæsthetic has been poured upon a piece of lint, has been greatly underestimated. When 76.5, 38.25, 25.5, 12.75, and 6.375 grains respectively of pure chloroform were poured upon a piece of lint, and 100 cubic inches of air, at a temperature of from 60 to 64 deg. Fahr., were passed over it in each instance, the resultant atmosphere contained 9.9, 8.5, 6.9, and 4.3 per cent. of chloroform vapor (*Transactions of the Obstetrical Society of London*, vol. x, p. 136). When little more than a drachm, therefore, of chloroform is poured upon lint at ordinary temperature, a patient may inhale an atmosphere containing more than 9 per cent.—a dose certainly not free from danger."—JOHN MURRAY, M. D., *in London Med. Record.*

Wolff on Scleroderma Malignum.—At a recent meeting of the Medical Society of Berlin (*Berliner Klinische Wochenschrift*), Dr. Wolff exhibited a rare form of cutaneous disease in a living subject, a man aged forty-nine. In March, 1872, a dense and painful induration of the skin appeared between the right mastoid process and angle of the jaw. This rapidly spread in all directions, so that in August the whole of the right side of the neck was invaded, and the head drawn down by the hardening and contraction of the affected tissues. The further progress, which was carefully watched, began by the appearance of fresh spots a short distance from the invading disease, and ended by their uniting with the already affected skin. In December the limits of the disease were: below, the third intercostal space; above, the occiput; behind, the middle line of the neck; and in front, it stretched beyond the center of the sternum, chin, and nose. There was no ulceration; the skin and subcutaneous fascia were hard, firm, and immovable; the surrounding tissues œdematous, and in places darker than natural. Dr. Wolff regarded the case as one of carcinoma of the skin, of the variety described by Velpeau as "*squirrhe en cuirasse.*" This opinion was founded on the pain, the "malignant course," and a microscopical examination of a piece cut out, which showed an alveolar matrix of waving reticular bundles of connective tissue, with abundant elastic fibers, containing in its loculi epithelial cells and birds'-nest masses.

In the discussion which followed, Dr. Lewin maintained the case to be scleroderma, arguing from the absence of ulceration and of any secondary enlargement of the glands, as also from the fact that Velpeau's "*squirrhe en cuirasse*" has only been observed in women, and always begins from the breast. He thought the microscopical characters not decisive. since masses of concentric, epidermic-cells had been found in a case of Rosbach's, which turned out to be simply scleroderma. [The abundance of elastic fibers tells in the same direction.—REP.]

Brain Stimulants.—A prominent clergyman in a neighboring city writes us, that for many years he has been in the habit of limiting his use of tea and coffee, and his "occasional cigar," to the latter part of the week, and, as he fancies, with the result of being able to compose with less effort than when he has either abstained entirely from their use, or when, as once or twice, he has indulged in them continuously for a brief period.

Herein is a valuable suggestion to brain-workers in any profession the exigencies of which call for occasionally increased and severe efforts. Tea, coffee, tobacco, and alcohol, by retarding the changes in the tissues of the body, which is their physiological action, are supposed to allow the energy thus conserved to manifest itself in the higher form of cerebral activity—in simpler language, they are stimulants to the nervous system; and, in the proper dose, there can be no question that they do exalt and stimulate brain-action. But there is equally no question that the retarded tissue changes are at the expense of vitality generally—the vitality of the body, that is, its health and strength, being ever in relation to the newness of the atoms which compose the body—and these tissue-changes, the work of waste and repair, must be accelerated in some manner, and to a corresponding extent, in order to preserve the balance.

The obvious lesson to be gained from these facts, is, that during periods of intense and unusual mental activity—a lawyer in trying an engrossing case, a banker during a financial stress, a company officer at periods of increased responsibility, an editor or political leader carrying through an important measure—that at such times brain-work may be done with more facility and at less expense, by a judicious use of this class of agents. Provided, however—provided that the balance be struck at once when the necessity for them is obviated.

The means of restoring the balance include, first, abstinence from the agents themselves; second, comparative rest for the brain; and lastly, and quite as importantly as the preceding, those measures which accelerate tissue-changes and of which the essential ones are physical exercise and bathing—notably, the

Turkish bath—and nutritious, easily assimilated food, by the first of which, the breaking down of the older particles and the excretion of poisonous waste-matter are facilitated, and so tissue-change in the interest of waste is promoted, while the last furnishes material for renewal and growth.

With such a regimen, based on an intelligent application of means to ends. we would have fewer cases of men prematurely breaking down under efforts they might make with ease did they only know when and how to open the throttle-valve, or to put on the brakes. This view of the subject must not be construed into an argument for a mere sensual indulgence. It is intended for men as they are, and with regard to conditions as they exist. These agents are used. and probably always will be. They have their uses; and knowledge of these will do more to prevent their abuse than the wholesale condemnation which frequently arises from ignorance.—*Hygiene.*

Treatment of Infantile Cholera.—Dr. Peltier recommends in the above disease a double plan of treatment, consisting simultaneously of tonics and absorbents. He uses the subnitrate of bismuth internally (seven grains to half a drachm in a mixture) and in enemata, beaten up with the yelk of an egg. At the same time he occasionally employs enemata with starch or krameria. The tonics consist of the juice of beef, raw meat (one ounce to an ounce and a half twice daily), and syrup of pepsin (half an ounce to an ounce daily, in teaspoonfuls). He also advocates the simultaneous use of collodion paintings over the abdomen.—*Mouvement Médicale. Dec.* 7, 1872.

Geophagie or Dirt-eating.—Dr. Galt, in his "Medical Notes of the Upper Amazon," published in a late number of the *American Journal of the Medical Sciences*, has furnished us with some curious information on a subject that does not usually come within the range of professional notice—viz., the strange practice known as "dirt-eating," or "geophagie." This disease, according to Dr. Galt, now enters as of the chief endemic complaints of all tropical America, and at the distance of over two thousand miles from the sea, on the Amazon valley, where the negro is rarity, being merely a waif from Brazil or the Pacific coast, it is the most important disease among the children and women of the country. Here, on the Maranon, the half-breeds are mostly addicted to the practice of dirt-eating—neither the pure savage nor the more cultivated being so often the victims. The accounts about the tyranny of this habit of dirt-eating on the victims of it would seem almost fabulous, Dr. Galt says, were there not evidences all around one to give sanction to them. Children commence the practice from the time they are four years old, or less, and frequently die from the results in two or three years. In other cases they grow to manhood or womanhood; and Dr. Galt speaks of having himself seen in the case of a Mestizo soldier, who was dying from the dysentery which sooner or later supervenes on this habit, the poor creature, half an hour before his death, detected with a lump of clay stuffed in his sunken cheeks. Officers who have the Indian or half-bred children as servants in their employ sometimes have to use wire masks to keep them from putting the clay to their mouths; and women, as they lie in bed sleepless and restless, will pull out pieces of mud from the adjoining walls of their rooms to gratify their strange appetite, or will soothe a squalling brat by tempting it with a lump of the same material. If persisted in, the effects are surely fatal, at varying terms of years, some living tolerably to middle age, and then dying with dysentery. In children dropsy usually appears to be the most prominent cause of decline and death.

Phytolacca Decandra in the Treatment of Inflammation of the Mammary Glands.—G. W. Biggers, M. D., of La Grande, Oregon, says, in the *American Journal of Medical Sciences:* The following cases are stated as the *result of my experience* only with the remedy in question, and I trust that others may try it and report the result:

Case I. Mrs. H., on third day after labor with her second child; mammæ commenced swelling, from an accumulation of milk. Did not see her until the symptoms were so urgent that there could be no mistake about the commencement of an abscess.

I pursued the antiphlogistic treatment, both general and local, until there was no promise of improvement; on the contrary, the case was continually getting worse. I then prescribed fluid ext. phytolacca decandra, gtts. xx, every three hours, in water. A very marked improvement took place in twelve hours, and in thirty-six hours the patient was well. There was also a suppression of the lochia, which was also re-established.

Case II. Mrs. B., whose child died a few hours after its birth, was attacked, after the secretion of milk took place, with inflammation of the mammary glands, from over-distention, and had the milk withdrawn very regularly, yet the case continued worse, threatening an abscess. I prescribed fluid ext. phytolacca decandra, gtts. xx, every three hours. Marked improvement in ten hours, and a complete recovery within thirty-six hours. There was also a suppression of lochia in this case, which was re-established with the cessation of the mammary inflammation.

Case III. Mrs. G., at the fourth month of pregnancy, was attacked with inflammation of both mammæ, severe pain, swelling, and very great heat, with severe rigors, amounting to a distinct chill. I prescribed fluid ext. phytolacca decandra, gtts. xv, every three hours, in water. The symptoms all subsided, and the patient fully recovered within forty-eight hours, with no other treatment.

I have used the remedy above named in many other cases of mammary inflammation, and it has never yet failed in a single case.

The preparation used was Thayer's fluid extracts, for the reason that the plant does not grow in this State. A tincture from the green root would, I think, be more reliable.

Morphia and Atropia.—At a recent meeting of the Medical Society of the Dublin College of Physicians, Dr. J. M. Finny read a paper on a case illustrating the general physiological antagonism between atropia and morphia. The patient, a lady of nervous temperament, aged twenty-five, was subject to neuralgia; and for this affection Dr. Finny had, on previous occasions, used a combination of atropia and morphia, with both anodyne and curative effects. When he was consulted by this lady, in October, 1871, he determined, as usual, to administer the drugs at the patient's ordinary hour of repose. Instead of the usual dose of one-fiftieth of a grain of sulphate of atropia, at least double that quantity was injected hypodermically, in combination with a fourth of a grain of acetate of morphia. In about twenty minutes Dr. Finny found the patient complaining of great cold, with the tongue dried, parched, and rough; dryness of the throat; speech thick and inarticulate; dimness of vision; scintillation; pupils much dilated; pulse small and rapid, 130; respiration shallow, 32. Ten minutes afterward these symptoms had increased; there was great uneasiness and tossing about; delirium had also set in; the patient was grasping at imaginary objects in the air. Dr. Finny now resolved on using morphia as an antidote. With much difficulty, owing to the patient's perturbed state, he injected one-third of a grain of the acetate. In less than five minutes the restlessness and jactitation ceased, the skin became warm, respiration fell to 20, and the pulse came down below 100, and was fuller. In ten minutes from the time of the injection deep sleep had set in, and this continued through the night. The next day the lady had quite recovered, except for the still existing dilatation of the pupils. The author then detailed the opinions of Dr. John Harley, Mr. Benjamin Bell, and others, on the subject of the antagonism between atropia and morphia, and of the toxical doses and effects of the former. Dr. MacSwiney said that at 3:30 P. M., on the 14th of last February, thirty minims of liquor atropiæ had been given to a man, aged forty, in mistake for the same quantity of Battley's solution of opium. At 4 P. M. an emetic, which had been administered, acted, and stimulant treatment was commenced. At 7 P. M. the man was quite insensible, anæsthetic, with eyes open and pupils enormously dilated; pulse very rapid and small; respiration slow; surface cold, and bathed in clammy perspiration. Thirty minims of liquor morphiæ hydrochloratis were now given, and the dose was repeated until three drachms in all of the solution had been taken. Consciousness returned at midnight, when the patient complained that he could not see. He recovered perfectly. Dr. Hayden reported a case of poisoning by belladonna berries in a boy. The leading symptoms were vomiting, unmeaning laughter, and strange staggering gait. Dover's powder was given, and the patient recovered; but the pupils did not resume their normal appearance for two or three days. Dr. Hawtrey Benson, in November, 1869, treated a child aged four, for toxical symptoms, consequent on eating belladonna berries. The little patient was quite insensible, with jactitation and floccillation. The face was flushed, the pupils were dilated, and dysphagia and thirst were present. Control over the bladder, also, was lost. The treatment was by the tincture of opium given in three-minim doses every second hour. This child completely recovered, having taken fifty-four minims of laudanum within thirty-six hours.—*Med. and Surg. Rep.*

Correspondence.

PHILADELPHIA, *May* 29, 1873.

MESSRS. EDITORS LANCET AND OBSERVER: Have been in this neighborhood for some days, and thinking a brief letter might be acceptable, send you this.

Perhaps no city in the Union is making more rapid strides in growth and improvement than this same city of "brotherly love." It has been three years since my last visit here, and the increase in size has been wonderful; while the buildings themselves have more than done credit to their architects. Nor have the medical fraternity been idle. Both colleges are working hard for new lecture-room and hospital accommodations. The foundations for the new university building have been already laid on the old almshouse property in West Philadelphia, with a solid money basis for future operations. The site is a fine one, partially occupied by the handsome classical university, which, built of party-colored stone, is already completed and in full operation. Both the University and Jefferson have summer sessions, which are still in progress. Had the pleasure of hearing Dr. Getchell, of the latter college, on "Congestive Menorrhagia." He is a tall, slender man, about forty, with dark hair and eyes. As a lecturer, he is fluent, clear, and concise; uses but few reference notes, and illustrates his remarks clinically. Wednesday witnessed the removal of an old burn cicatrix from popliteal region and union of the dissected flaps, to remedy a contraction that was impeding locomotion, in a boy seventeen years old. The operation was neatly and rapidly performed by Dr. D. Hays Agnew, who, by the way, has grown very much older-looking in the last few years. Pure ether was used, and the patient was never as completely unconscious as he might have been under chloroform. Silver sutures, adhesive straps, and the old-fashioned oakum covering, with posterior angular splint, completed the dressing till the union of the cut surfaces would admit the use of a straight splint. Following this was an amputation of forefinger at second phalangial articulation for injury involving joint, by a young man whose name I did not learn. Ether was used in this case, with same result. Dr. Agnew also exhibited a six months' old humero-axillary dislocation, in which two unsuccessful attempts had been made at reduction. The patient (a sailor) had an almost normal use of his arm, even being able to place the hand of the injured arm upon his head. With such use of the arm, the doctor advised against any attempt at reduction. This completed the clinic of Dr. Agnew, whose running comments on the cases before the class were very interesting.

Inclosed you will find a partial hospital report, which is a daily item here. It struck me as an excellent thing. Saw the name of our young friend, Dr. Wm. Judkins, on the Continental register, but failed to see him.

I regret my inability to present matter of more interest to the profession. With kind wishes for the success of your journal,

I remain, yours truly,
M. B. GRAFF.

Hospital Items.—The following persons were admitted to St. Mary's Hospital:

George Madder, age 23, living in Downington, Pa., fracture of bones of forearm, resulting from a fall.

Edward M. Carr, age 45, living 1226 Marlborough street, incised wound of face, accidentally struck with a shovel.

Ed. Grimer, age 60, living in Cadwalader street, hand injured at Truman & Baker's planing mill.

Wm. Caffrey, age 3, living at 541 Ellis street, hand caught by a a gate and badly lacerated.

George Meneer, age 16, living corner of Eighth and Callowhill streets, hand caught by a circular saw at Pendleberry's saw-mill, and badly lacerated, requiring an amputation of thumb and finger of left hand.

The following were admitted to the Pennsylvania Hospital:

Michael Murphy, aged 24, living at 318 Stanley street, run over by a wagon, and right foot fractured.

Joseph Hanes, aged 13, living at 3706 Story street, left hand fractured while coupling cars.

Andrew Kromer, aged 52, residing in Northampton county, right hip bone fractured from a fall.

Joseph Rourk, a laborer, fell at Fifth and Willow streets, and broke his leg. He was taken to the Episcopal Hospital.

An unknown man fell from a cart at Thirteenth and Market streets, and was badly injured. He was taken to the Homeopathic Hospital.

Editorial.

The American Medical Association.—For the report of the proceedings of the meeting at St. Louis, we are indebted to the Philadelphia *Reporter*. A perusal of the report does not convey the idea that much important work was accomplished. There were the usual platitudes in the way of resolutions, that fall still-born from the meeting. There were some good papers read to sections; and there were the several general reports on education, literature, etc., that amount to very little. That we may not be deemed carping, take the following, which is given as the point of our friend's report on medical education. "There is much dissatisfaction on the subject of medical education. The administrative agencies are responsible for the failures. In this country, education took the typical form, which still prevails here. That event was in contrast with similar schools in other countries. General education enters largely into the usefulness of medical knowledge. The low rates of tuition are attributable to competition. As education is developed, more remunerative prices will be obtained. [?] We have a right to expect that the schools shall be elevated to the lights of the day. [If anybody knows what they are.] By recognizing the fact that we have the true modes of teaching, it will show that this association is a tribunal before which these questions should be considered." "Tribunal" is good, in view of all the association has ever done to exercise authority pertaining to matters of education. We certainly approve the suggestion to do away with these reports, and substitute annual papers on medicine, obstetrics, and surgery. The social feature was all that could be desired. The association elected Dr. J. M. Toner, of Washington City, President for next year, and adjourned to meet in Detroit on the first Tuesday in June, 1874.

The following elegant extract is vouched for as a genuine document presented to a horse-owner in St. Louis:

"Sant Lewis, Ganewerry the 4d, 1873. Mr. ——— to james HanKox Vetturnerinary physickian and Surgeant Dr. Too medikle advice twict, 3 dollars; Konsultation over a ded mare sed to hev hed the eppzout, 75 cents; Going to see two sick hosses in the nite (very cold), 2 dollars; To treatment of a kream kolored hoss two days with medisuns, 4 dollars 50 cents; To making an obstetrikul examinashun of a hosses throat, 1 dollars 50 cents; To settin up all nite in a barn with a sick hoss, 2 dollars 50 cents; To writin a preeskripshun for botts, & also one for spaving, 1 dollar; To holdin a postmortim examinashun on a hoss who afterwards recovered, 1 dollar 50 cents; To givin my opinyun one day on the street regarding the kause of the zoot, 4 dollars. Totil, 20 dollars, 75 cents."

The Obstetrical Journal of Great Britain and Ireland.—We have received the first two numbers of the American reprint of this excellent journal, and find our expectations more than realized. Its value is greatly enhanced by the addition of an American supplement.

Several of our exchanges are giving close attention to the subject of *life insurance;* especially we find in the New York *Record* many articles bearing upon the subject. We shall reprint some of these from time to time, because a large proportion of the physicians of the country are directly interested in the intelligent study of all the points bearing upon the whole question, especially examinations.

The following note sufficiently explains itself. We hope to see a large attendance at Columbus:

CINCINNATI, *May* 29, 1873.

DEAR DOCTOR: The Ohio State Medical Society will hold its twenty-eighth annual meeting in Columbus, Ohio, on Tuesday, June 10, 1873. Forty-odd special committees are expected to report on various and interesting subjects. Considering the situation of Columbus, its accessibility and ample hotel accommodation, with the usual good health at this time of the year—thus affording gentlemen of the profession an opportunity to leave home—together with the fact that the meetings of our Society have been steadfastly growing in interest, makes us confidently expect this meeting to be a great success. Dr. Norman Gay, of Columbus, chairman of the Executive Committee, writes me that the "railroads and branches centering at Columbus will make the usual arrangements for fare to members and their families." I presume this arrangement will apply to all physicians and their families who wish to attend, whether members or not. Try and make it convenient to be in attendance. It will be necessary to show this to conductors.

Very respectfully,

J. W. HADLOCK, M. D.

Secretary Ohio State Medical Society.

Adulteration of Copaiba with Castor Oil.—Several specimens of copaiba balsam adulterated with castor oil have, within the past year, come under the notice of Prof. E. S. Wayne. The sophisticated article appeared to have a greater consistency than the genuine copaiba—a somewhat lighter color. To the taste and smell no great difference between it and the genuine could be observed; its superior density alone was what caused suspicion as to its purity, and led to an examination of it and the detection of the above-named adulterant. In the experiments made to detect the adulterant, it was found that petroleum benzine was a quick and perfect means of so doing. It was found that the pure copaiba was perfectly soluble to a clear solution in it, and that castor oil was not. It formed a milky mixture upon being shaken together, which quickly separated into a denser and lighter liquid, the lower containing all the oil. The suspected article was mixed in a test-tube with three times its volume of benzine, and shaken; a milky mixture was formed, which quickly separated into two portions—the upper containing in solution all the copaiba; the lower the castor oil. The latter, upon further examination, was found to be, as mentioned, castor oil. Hence, castor oil, as an adulterant of copaiba, is one of the most readily detected of the many substances that can be used for the purpose; and an article that will not freely and entirely dissolve in petroleum benzine must be rejected as impure. From further experiments with other substances, such as Venice turpentine, true and artificial and other fixed oils, the test unfortunately has no value.

Note, the amount of castor oil found was not the volume separated in the lower stratum, but about fifty per cent. of that. As from experiment from a measured volume in a test-tube, the lower portion separated was double the volume of oil used, when the quantities used were those named in the experiment above.

American Wines.—A recent number of the *Philadelphia Reporter* speaks in terms of proper commendation of our native wines. The editor particularly alludes to one point we think not sufficiently considered by the physicians of this country, viz., that in many, if not most cases, wines grown abroad and placed in our market must be fortified with alcohol to permit the transit; so that even with the best foreign wines we do not obtain a pure grape product. This evil is of course avoided in the use of American wines. In many parts of this country, from the Atlantic to the Pacific, we now vie with the world in the matter of wines; and of all these, we regard the wines produced in the vicinity of Cincinnati as amongst the best. In a recent testing of wines by the American Wine Growers' Association, Thompson's hillside wines run up from 88 to 96; other wines, as M. Werk, Bogen, and Ross, graded very little inferior. So we think we can safely advise our friends everywhere to order Cincinnati wines.

To Contributors.—We have recently received a paper on Cerebro-Spinal Meningitis, but without author or locality, or anything to enable us to ascertain its identity. We hope to hear from the author. Another paper on the same subject, forwarded on news-slips, is too lengthy for our use.

Dr. Ann Preston.—This very excellent lady, so many years identified with the Women's Medical College of Pennsylvania, is dead. She was a woman of rare excellence and great energy. We have before us the memorial address of Dr. Eliza E. Judson, giving an account of her life, and efforts in behalf of woman's medical education. In this connection we take occasion to say that the organization and plans of the Women's Medical College at Philadelphia, may be taken as a model by most of the older colleges of the land, in the discipline and requirements that secure the title of doctorate.

As indicating the growing attention the subject of hygiene is receiving, not only from the public, but from the medical profession, we are glad to see that *The Practitioner* (Macmillan & Co., London and New York) is to be enlarged by the addition of a department devoted to Public Health. The forthcoming number will contain, under this head, articles on Sanitary Organization in England; the Health Aspects of Sewage Irrigation; the Propagation of Typhoid Fever by Milk; International Hygiene in relation to Plague and Cholera.

Reviews and Notices.

Mineral Springs of North America: How to reach and how to use them. By J. J. MOORMAN, M. D. Philadelphia: J. B. Lippincott & Co.

Dr. Moorman has been interested in mineral springs for more than a quarter of a century: his writings are tinctured with his associations; nevertheless, his book contains much that is of interest to the profession. The little volume before us is a new edition of a book heretofore noticed in this journal. It gives a summary of the medical springs of North America, their properties, their medical value, means of reaching them, together with all those matters that interest either the pleasure-seeker or the valetudinarian. This new edition of Dr. Moorman's book is for sale by Robert Clarke & Co., and will be read with interest by all those in search of health.

The Mineral Springs of the United States and Canada: With Analysis and Notes on the prominent Spas of Europe, etc. By GEORGE E. WALTON, M. D., Lecturer in Miami Medical College of Cincinnati. New York: D. Appleton & Co., 1873.

In the study of the uses and values of mineral waters there are so many things of interest that we scarcely know where to begin. We have above noticed a new edition of Dr. Moorman's book, and we have at the same time before us a new candidate in the same direction of inquiry. Our friend Dr. Walton gives a very complete review of the mineral-springs resorts of America, and in addition gives a more than usually careful outline of the respective value of these waters. So far as physicians are concerned, perhaps the most interesting matter is found in Chapter IV, in which is very carefully discussed the whole general action of mineral waters, the peculiar effects which we may expect as their legitimate action upon the system. And in connection with this we may select Chapter VI, in which an extended list of diseases is enumerated, in which various mineral waters are supposed to be specific. The particular criticism we have in this direction is the fault very common with enthusiasts—that too much is promised. Of the chief spas in the world, satisfactory analyses are given, and pleasant directions as to geography, routes of travel, and hotels. Take it altogether, we congratulate our townsman on the excellent little book he has presented to us, as probably the most complete guide extant to those seeking information on this subject.

For sale by Robert Clarke & Co.

A Treatise on the Principles and Practice of Medicine. Designed for the use of Practitioners and Students of Medicine. By AUSTIN FLINT, M. D., Professor of the Principles and Practice of Medicine, etc., in the Bellevue Hospital Medical College. Fourth edition, carefully revised. Philadelphia: H. C. Lee, 1873.

Flint's Practice of Medicine has become so fixed in its position as an American text-book that little need be said beyond the announcement of a new edition. It may, however, be proper to say that the author has improved the occasion to introduce the latest contributions of medical literature, together with the results of his own continued clinical observations. This has made a necessity for the introduction of some new matter, and the rewriting of some of the former parts, all of which has increased the bulk of the volume about seventy pages. Not so extended in bulk as many of the standard works on practice, it still is sufficiently complete for all ordinary reference, and we do not know of a more convenient work for the use of the general busy practitioner.

For sale by Robert Clarke & Co. Price, $7.00.

Hand book for the Physiological Laboratory. By E. KLEIN, M. D., J. BURDON SANDERSON, M. D., MICHAEL FOSTER, A. M., M. D., and T. LANDER BRUNTON, M. D., D. Sc. Edited by J. BURDON SANDERSON. In two volumes, with one hundred and thirty-three plates, containing three hundred and fifty-three illustrations. Philadelphia: Lindsay & Blakiston, 1873.

The text of the beautiful work before us is contained in Volume I, while Volume II is entirely devoted to the illustrations. As the title indicates, this is not intended as a system of the science of physiology, but rather as a guide for the experimental studies of the student. Each of the distinguished colaborators to this work has contributed his particular department, and yet the whole harmonizes. Part I is histological, and devoted to the preparation of elementary tissues. Part II treats of the preparation of compound tissues. Then we have physiology proper, divided into three parts: First, of the blood, circulation, respiration, and animal heat; second, of the functions of muscle and nerve; third, of digestion and secretion. This pretty well indicates the general plan of the work, which will be found of great value for the purposes of the experimental student.

For sale by Robert Clarke & Co. Price, $8.00.

A Hand-book of Medical Electricity. By HERBERT TIBBITTS, M. D., L. R. C. P., London, etc. With sixty-four illustrations. Philadelphia: Lindsay & Blackiston, 1873.

This little book is intended for the guidance of the practitioner, and affords a condensed outline of the subject in its various aspects. Chapter I treats of the general subject of medical electricity and instruments. Then follow directions for the application of electricity to various organs, with, also some general considerations of electro-therapeutics. There is nothing extravagant or pretentious in Dr. Tibbitts' work; and as medical electricity is now attracting so much interest, physicians will find this a very satisfactory guide to their investigations, as well as to their practice.

For sale by Robert Clarke & Co. Price, $2.00.

Civil Malpractice. A Report presented to the Military Tract Medical Society at its Fifteenth Semi-annual Meeting, January 14, 1873. By M. A. MCCLELLAND, M. D. Chicago: W. B. Keene, Cook & Co., 1873.

The report before us is a very readable and instructive one. The author alludes to the lamentable fact that instruction in our medical schools, in medical jurisprudence, is deficient both as to plan and completeness. The topics embraced in this little volume, and the cases cited, will be of general interest to all medical readers, even those who have access to standard authorities.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

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Original Communications.

Art. I.—First Phases of Living Forms.

By J. B. HOUGH, M. D., Professor of Chemistry and Toxicology in Miami Medical College of Cincinnati.

Certain microscopic observations made by the writer at various times during the last two or three years are hereby submitted as further confirmations of the published statements of Pringsheim, Hicks, Carter, Nicolet, and others, concerning those heterogenetic changes with which modern biology has to deal.

The practical bearings of questions of this nature upon physiological and pathological studies need not be mentioned.

Whatever may be the final decision of the question of so-called "spontaneous" generation, the changes here recorded are believed to have undoubtedly occurred. The cases are selected somewhat at random from a large number of similar observations. Without any attempt at graphic description, I desire to state simply and summarily what I have seen. As will be readily observed, two classes of changes are recorded—changes from higher organisms into lower, and changes from lower organisms into higher. The difficulty which besets the problem of the origin of living forms *de novo*, or from real or supposed invisible germs, has nothing to do with the question of transformation of visible organisms. An intelligent, honest search, and earnest desire for truth, are the only requisites for sound conviction. As long ago as 1845, changes similar to those here confirmed were published by Dr. Gros.* But few truths that bear not the seal of orthodoxy can gain a hearing in less than a quarter of a century, and the statements of Gros were generally disregarded.

A small quantity of sea-water, obtained in the fall of 1871, contained, besides several marine algæ, numerous spirillæ, a few diatoms, and a small number of monad-like forms in very active motion. The whole was placed in a shallow glass jar and replenished with artificial sea-water. In a few days some very decided changes became manifest. Considerable portions of an ulva, previously green and healthy-looking, began to assume a brownish tint and exhibit general signs of impending dissolution. The chlorophyl granules, besides changing to a brown or pale amber tint, began also to assume an irregular outline and to aggregate themselves into clusters, and also to show evidences of an external covering of transparent protoplasm. Finally, the different clusters of chlorophyl granules, with their gelatinous envelopes, separated entirely from each other; while the individual granules of which they were composed coalesced more or less completely, thus forming, to all appearances, veritable amœbæ. The specimens were carefully watched in suitable growing-cells, and the following additional changes observed. Some of the amœboid masses, with their contents, became in a short time entirely transparent by the gradual disappearance or solution of the chlorophyl granules, while within the space of one or two hours from the date of separation the masses began to take on the appearances of life peculiar to the protistic forms they seemed to be. The slow, uncertain, progressive motion, the protean changes of form, the protrusion and retraction of pseudopodia in some instances, and the radiating filaments of the actinophrys in other individuals, were all distinctly observed.

In other amœboid masses, indistinguishable in other respects from the masses before mentioned, the chlorophyl, instead of disappearing, seemed to have undergone a process of fusion or reorganization, resulting in the production of two, four, or some even number of diatoms (encyonema). In these cases the amœboid movements were not observed, and the retrogressive changes seemed to have culminated in the initiatory steps of a higher organization. At this time the whole mass of sea-water was teeming with amœbæ and diatoms, while the spirillæ had apparently all disappeared, and a new species of marine algæ (ulva linza) started into growth in the greatest profusion from all parts of the jar. Small drops from the same jar were repeatedly watched at short intervals for several hours, and in almost every instance certain forms disappeared and others appeared in their stead; while in numerous instances forms supposed to be transitionary were observed, and in a few cases changes believed to be transitionary were distinctly seen.

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*Bullet. de la Soc. de Nat. de Moscou, 1845, p. 339.

In conclusion, from numerous observations with both salt and fresh water, the writer states his conviction that the following, among other transformations, may and actually do occur:

Chlorophyl into protoplasm; chlorophyl into actinophrys; chlorophyl into protamœbæ; chlorophyl into amœbæ; chlorophyl into arcellæ; protoplasm into actinophrys; protoplasm into protamœbæ; protoplasm into monads; amœbæ into englenæ; amœbæ into protococcus; amœbæ into paramœcia; amœbæ into scenedesmus; protococcus into desmids.

Art. II.—On the Specific Action of Remedies.

By F. SEYMOUR, M. D., Chicago, Illinois.

Some year and a half since I wrote a short article upon the action of remedies upon disease in your journal, and I now propose to scrutinize the habit of using agents in and for a specific purpose, the which, if looked at in a proper light, seems, to say the least, somewhat ridiculous, and opposed to philosophic, as well as physiologic principles. It has unfortunately, of late, been too much the custom among medical men, to take the assertion of some one among them, as to the remarkable qualities and remedial power of some agent in certain diseases or disorders, and without giving the matter either sufficient thought or attention to use it or them, on the assertion of the party introducing it, particularly so if he has succeeded in establishing a reputation above the ordinary class of men in his profession. It is this careless way of acting that has been the means of thrusting constantly before the profession medicines or agents almost innumerable, many of which

> "Flit before us like a summer dream.
> And quickly pass away,"

and are forgot, only to be replaced by some new one; and so we go, like women's fashions, from one to another, receiving, believing, and discarding, until we become skeptical, even in agents that are really valuable. It is not necessary or possible to particularize the many medical agents that have time and again been brought forward only to be forgotten, but to bring forward some of the new (comparatively) agents that we are using, as an example. And it is not only physicians who bring forward these agents, but we are beset with constantly increasing numbers from the druggists and manufacturers, who, reading of new medicinal agents, at once commence preparing, advertising, and issuing them, in different combinations, until the market is flooded with preparations, each of which is lauded by the makers, according to their judgment of the superior way it is prepared. Among other preparations at present constantly thrown into the market, is "pepsin," the which is just now (owing to the different style of preparation) making a considerable noise among the pharmacists and others who are preparing it, each claiming a superiority in the procuring it in a "pure state" by their peculiar processes. But it is not to that end that I have written this article, but to call attention to the (in my humble opinion) useless action of the agent. Now, let me ask how it can *alone* benefit digestion, or rather indigestion, any more than so much bran. What is digestion? What does it depend upon? Does it not, in the name of common sense, depend upon the nervous influence entirely? If not, could not the same agent act beneficially in the same way in the dead body? What is the use of throwing into the stomach powdered pepsin, or anything else, if the nervous action necessary to digestion is deficient? How is pepsin to supply the nervous loss necessary to perfect assimilation, digestion, etc? Can it even be digested itself, or assimilate, without the aid of the nervous force which causes digestion? Has the physical body, *per se*, the elements of action, in any shape, to act, alter, improve, become diseased, or change any of its functions, secretions, etc? Surely not. Did any human being ever see or hear of the dead body becoming infected with the small-pox, or an ulcer or abscess heal on the dead body? And yet we throw in agents into the stomach to aid digestion, without attending to deficient nervous action, and expect it to relieve such imperfect action. Can we poison with opium, or arsenic, if the nerves of the stomach are divided? Certainly not; and we also can not cure or relieve indigestion by pepsin, or pancreatine, etc., if we have not the healthy nervous action necessary to produce perfect digestion; and *if we have*, we want none of those inert substances, *for we have it not.* Suppose, for instance, we need a certain amount of nervous force or action to properly carry on the proper actions of the body, and we exhaust that power by some means—by mental anxiety, decreased temperature, the passions, or physical injury—does, or can any rational man conceive that the actions of that body can be carried on properly when that power which causes them is imperfect or exhausted? Again, what manner of common sense is it to suppose that an agent *will act always, and at all times, upon the body in a certain way.* Why does opium to-night produce sleep, and to-morrow night keep the patient awake? Why ipecacuanha to-day vomits and to-morrow purges, or produces sleep; while the opium, which produces sleep, will keep awake, or act as an emetic, as the ipecac did? Why? Because the brain and nervous system are in a different condition or state. So would the pepsin, *if capable of increasing digestion at times, at times would decrease it.* Iron, at times, acts as we say, as a tonic, and strengthens; at other times it produces an extreme depression—is it a tonic then? Arsenic, which to-day will benefit a patient greatly with a certain disease, will, in another person, afflicted with the same, do a great harm. It is not an idiosyncrasy—it is the different conditions of the nervous organization, at different periods; and these periods of action, rest, and change are the laws of life. If we look at what we call disease, we find every disease, or functional derangement, with premonitory symptoms; *alike* whether the toothache, or puerperal fever, we find the constitutional action altered, either in temperature or time, either in motion or rest. We find the chill or rigor more or less marked in every disease named, without any exception.

We find the febrile stage following in every disease, without an exception; whether in variola, rubiola, pneumonitis, encephalitis, rheumatismus, febris inter mittens or remittens, pleuritis, or scarlatina, or bronchitis, or any other disease, or in that now unfortunate attention-requiring disease, cerebro-spinal meningitis, and we also find a remission of the condition before noticed. Now, in all these stages, whether the lungs or any other organ becomes involved, we have the regular changes, not only organic and systematic changes, but *atomic* changes; and thus, how can we expect a specific action in every disease, or in any medicine? Nay, suppose we carry it further, to the sudden change produced by an emetic, which every one in the profession must have witnessed, could the same medicine given during the different conditions act the same? Observe even the changed condition of the patient during his first catheterism, even as has been known, from life to death, within a few minutes, and then think what a different action agents must have in different conditions of the body. Now, can these conditions of the body occur in themselves, without some power causing these conditions? Certainly not, or else, as I have before said, the dead body could also do so. It is the brain and nervous system, the master, the only master and director that can influence the body; and until you can cause that to act or change its actions, you may pour in pepsin or any other *in*, and you will simply do nothing but fill a space—if there is such a thing in nature. Now, instead of our thinking to cure disease, or disorder of action or function, by the administration of what are called specific remedies—and there can never be a specific remedy, not excluding even sulphur for the itch—let us pay more attention to the nervous system, and by administration that will alter that, force the body in obedience to its healthy actions; and let us pay more attention to the living than the dead body; study the laws of life rather than the evidences of death; study cause of beginning of disease, rather than death the effect; and soon the empiricism that is flooding the country and world will be swept back, and scientific practice of medicine, instead of stupid art and experiment, will beam on a grateful and happy people, who, trusting to wise practitioners, will sweep the charlatan where he should long have been, namely, to the nonentity of oblivion.

Art. III.—The True James Powder.

By J. S. UNSICKER, M. D., of Cincinnati.

This powder has gained for itself a great reputation on account of its uniform action in cases of obstinate fevers and severe colds; but more especially has this been the case in the treatment of pneumonia.

This prompt action was never attained by other antimonial powders, that vary so greatly in their action; at one time causing severe vomiting, at others purging; consequently could not be given in sufficient quantity to act promptly on the skin, causing gentle perspiration, which is the case where James powder is given. The latter was introduced in England by the late Dr. Robert James as early as 1746, and prescribed as *Pulvis Jacobi verus* by the medical profession of Great Britain, where it retained its reputation up to the present day. It was also sold in France, Italy, and the East Indies.

When Dr. James first introduced his powder, he prepared it in combination with mercury, thinking the better to conquer the then existing epidemic fevers; but as the powder soon gained popularity among the people, they would take it indiscriminately and cases of ptyalism was the consequence. He then omitted the mercury, and also abandoned the then existing patent, and thus the present powder was the result, and has now been in use for over one hundred years, and never been excelled or equaled by any of the many imitations. Having used this powder in my practice for twenty-five years with success, I can bear evidence as to its efficacy. It was also very successful in the hands of the late Professors L. M. Lawson, Taliaferro, and others of this city. It is better adapted to our warm climate than other antimonials, not having so irritating and relaxing an effect on the bowels as the latter.

The process of preparing the James powder is kept a secret, although its composition is well known to chemists. Dr. T. Thompson, in his Materia Medica, states that a specimen of James powder, examined by him, contained 10 per cent. of sesquioxide of antimony, and 50.24 of triphosphate of lime. This nearly accords with Dr. Maclagan's analysis, who found 9.80 in James', and only 2.89 in Newberg's so-called James powder. It is to the sesquioxide of antimony its diaphoretic influence is due. There are many imitations of this powder, but an observant physician can soon tell the difference between the physiological action of the genuine and the spurious. Many object to the process being kept a secret. But this is no more than is the case with all important working formulas of chemical laboratories, for which the manufacturer should not be blamed, as it costs them often much labor and capital before they succeed.

All, then, which we can expect of them—and it should satisfy us—is a perfect and unadulterated preparation.

The dose for a child is from one-fourth to one-third of a grain; for adults, from a half to two grains every two hours. This is generally given in combination with a little calomel, or without, as the case may be. But in severe colds, with dry skin and high fever, it is often given at one dose, from five to twenty grains, by itself, when a gentle perspiration will soon follow, and the fever disappear.

In consulting with many English physicians and pharmacists, I found but one opinion—that the *Pulvis Jacobi verus* is the only antimonial powder having a uniform action, which, by my experience, I found to be correct.

Art. IV.—Apomorphia.

By J. S. UNZICKER, M. D., of Cincinnati.

The subcutaneous introduction of apomorphia, as we find in an article lately published in the *Glasgow Medical Journal*, has always given a positive result, and the emetic action has been observed with great certainty. This was confirmed at a meeting of naturalists held at Leipzig last August, where some very interesting remarks were made regarding it.

The dose in man varies from one-twentieth to one-tenth of a grain, and the effect of the larger dose does not differ much beyond the emetic effect. The above journal further says: "It must certainly, therefore, be reckoned not the least important property of apomorphia, that its administration has great scope, and that even large doses may be used with safety—a property which certainly does not belong in the same degree to our most approved emetics, such as antimony, ipecacuanha, and copper. The smallness of the active dose of this drug, which for subcutaneous employment is of great moment, and the advantage of the administration of emetics thus, must be very apparent in the treatment of children, and not infrequently even in adults, in cases of poisoning, and where there is coma or loss of consciousness, and in many other cases. The shortest interval between its introduction and action is said to be from four to fifteen minutes, but sometimes also instantaneous. No unpleasant after-effects, such as accompany tartar emetic, follow, and may be partly explained by the rapidity with which it acts. But wherein it mostly differs from other emetics is, that the patient is perfectly well again very shortly after vomiting."

The solution should only be made when wanted, as it will lose in strength if kept on hand. But in a dry state, when kept in hyalite glass, it will not deteriorate. No unnecessary quantity should be prescribed, as the preparation is very costly when crystallized and in a pure state, and would only be wasted if not used soon after dissolving it. Apomorphia was first used in anamorphous state, which is of a grayish green color, but is not as soluble as the former, consequently not as well adapted for hypodermic injections.

A further list of soluble alkaloids for subcutaneous use is hereby added:

Sulphate of Codeia is considered by many physicians far superior to morphia in troubles of the chest.

Muriate of Narcotina.—I have found narcotina for many years one of the must useful remedies in the practice of children; also, in typhoid fever where there is great restlessness, subsultus, and want of sleep. Quiet sleep will follow its use without depression or affecting the brain. The patient will generally wake up free from delirium, and express himself as feeling very comfortable.

As a general thing, physicians, I believe, have been deterred from using narcotine by its name, which was the greatest misnomer ever conferred on any article in the whole Materia Medica, as it is the only one of the many active principles contained in opium that produces hypnotic but no toxic effects, and is not the narcotic principle, *per se*, of opium at all, and on this account becomes so valuable in diseases of children.

Calaberin, or *Physostigmin*, and *Curasin*, or *Woorara*, are said to have been used in Europe in cases of tetanus. Further trials, however, seem wanting to confirm the actual effects of the same.

As these chemicals are now to be had in the city, their beneficial effects can soon be ascertained.

Medical Declaration concerning Alcohol.—Many of the prominent members of the medical profession of this city have made a declaration to the effect that alcohol is a powerful drug, and when prescribed medicinally should be "with conscientious caution and a sense of grave responsibility." It is also declared that "the use of alcohol as a beverage is productive of a large amount of physical disease,—that it entails diseased appetites upon offspring, and that it is the cause of a large percentage of the crime and pauperism of our cities and country." We heartily indorse the circular and hope that some good may come of it. The only end that in our opinion it can serve, is, to lead many of those practitioners who prescribe stimulants so recklessly, to reflection upon the responsibilities which they assume. We have always held that alcohol should be prescribed with as much caution as opium, and should never be left to the discretion of the patient.

The third clause of the circular "welcoming any judicious and effective legislation—state and national—which should seek to confine the traffic in alcohol to the legitimate purposes of medical and other sciences, art, and mechanism," is visionary in the extreme, but is well enough to give some faint encouragement to such as believe that appetites can be controlled by legal enactment.

"*A most* singular banquet has just taken place in Paris. M. Decroire invited several of his friends and a small company of scientific men to dine upon the flesh of horses which had died from the glanders; of cows the victims of the rinderpest; and of an ass just killed for hydrophobia. It was a 'test banquet,'—one that proved the devotion of each man there to science, in that he was willing to risk his life to demonstrate, in the most practical manner, that the flesh of animals is not affected as human food by even the worst diseases."

Medical Societies.

TWENTY-EIGHTH ANNUAL MEETING OF THE OHIO STATE MEDICAL SOCIETY, HELD IN COLUMBUS, JUNE 10, 11, AND 12, 1873.

FIRST DAY—MORNING SESSION.

The society met in the City Council Chamber, at 11 o'clock, and was called to order by Dr. W. W. Dawson, who introduced the president-elect, Dr. A. B. Jones, of Portsmouth.

Rev. Mr. Grover, of the M. E. Church, opened the session with prayer.

Vice-Presidents Drs. A. Blymer, J. B. Hough, and W. J. Anderson, took seats with the president.

Secretary Dr. W. J. Conklin was present.

On motion of Dr. Sinnet, the reading of the minutes of the last annual meeting was dispensed with.

Dr. Gay, chairman of the Executive Committee, made the following report:

"Your committee have secured this council chamber for the use of the society. We suggest that the meetings be held at 9 A. M. and 2 P. M., daily; that the election of officers be held at 11 A. M., and the president's address at 2 P. M., on Wednesday.

"Tickets to a microscopical and electroscopical entertainment, directed by Prof. Wormley, will be furnished by the assistant secretary, for Tuesday evening, at 8 o'clock. There will be an entertainment at the Deaf and Dumb Asylum on Wednesday evening, at 8 o'clock.

"NORMAN GAY, *Chairman.*"

In the absence of the treasurer, Dr. J. B. Thompson was appointed treasurer *pro tem.*

The vacancies in the Committee on Admissions were filled by the appoinment of Drs. C. P. Landon, T. J. Mullen, E. Jennings, and A. C. Miller.

The Committee on Medical Societies was filled by the appointment of Drs. James Moore, T. McEbright, and E. Sinnet.

On motion of Dr. Thompson, it was resolved that the names of candidates for membership should be read in open society before being submitted to the Committee on Admissions.

REPORTS OF COMMITTEES.

The roll of special committees being called, quite a number were anuounced as ready to report.

Dr. Hough announced a volunteer paper, on "The First Phases of Living Forms," at the disposal of the society.

On motion, the secretary was instructed to telegraph the treasurer for his books and report.

Dr. Tom O. Edwards, Jr., of Lancaster, was now appointed secretary *pro tem.*

REPORTS OF DELEGATES.

Dr. E. Sinnet, delegate to the Kansas State Society, made the following report:

"The second annual meeting of the Kansas State Medical Society was held at Fort Scott. They have a membership of about forty, embracing many of the active working men of the State. Interesting papers were read, which, together with the discussions upon them, gave creditable evidence that men of ability are engaged in the profession of the West. Dr. H. K. Kennedy, of Topeka, was elected president. The society adjourned to meet at Lawrence, on the third Wednesday of May, 1874.

"E. SINNET."

Dr. Hough, delegate to the National Medical Association, reported:

" The last session of the American Medical Association was unusually large and harmonious. Much work was done and marked out that will tend to secure that harmony in the American profession so desirable to us all.

"J. B. HOUGH."

The Committee on Admissions reported favorably on the applications for membership of the following named gentlemen, all of whom were unanimously elected:

NEW MEMBERS.

Tom. O. Edwards, Jr., M. D., Lancaster; T. C. Minor, M. D., Cincinnati; John U. Riggs, M. D., Bryan; S. R. Voorhees, M. D., Mason; D. L. Gilliam, M. D., Nelsonville; T. C. Smith, M. D., Middleport; B. T. Spencer, M. D., Newark; J. M. Waddick, M. D., Toledo; S. S. Thorn, M. D., Toledo; T. R. Sparrow, M. D., Columbus; O. Frankenberg, M. D., Columbus; Frank Norman, M. D., Columbus; N. C. Reed, M. D., Columbus; T. J. Farrell, M. D., Columbus; J. M. Dunham, M. D., Columbus; R. Z. Seeds, M. D., Hilliard; J. G. F. Holston, Jr., M. D., Zanesville; P. Q. Fisher, M. D., Nashport; George W. Hill, M. D., Ashland; J. B. F. Morgan, M. D., Clarksburg.

The society then took a recess until 2 P. M.

AFTERNOON SESSION.

The society met at 2 o'clock, as per adjournment, and was called to order by the president. The treasurer, Dr. S. S. Gray, was present, and entered upon the discharge of his duties.

Dr. I. L. Drake was appointed to fill the vacancy on the Finance Committee.

REPORT OF TREASURER, ETC.

The treasurer presented his annual report, showing the indebtedness of the society to be $216.71. Report referred to Committee on Finance.

The librarian's report was now read, and, on motion, adopted.

The report of the Publication Committee, presented by Dr. Stevens, was also referred to the Finance Committee.

REPORTS OF SPECIAL COMMITTEES.

Dr. J. R. Black read his report on "Sanitary Science;" Dr. J. B. Hough read his volunteer paper on "The First Phases of Living Forms;" Dr. A. T. Keyt reported on "Caseous Pneumonia in its Relationship to Tuberculosis;" all of which were referred to the Publication Committee, with instructions to print. Dr. E. H. Hyatt made a report on "The Therapeutics of Alcohol." The paper was discussed by Drs. Bartholow, Hough, Russell, and others. Referred for publication.

Dr. A. Dunlap made the following verbal report on Ovariotomy:

"I fully intended, when appointed last year, to have made a further report on ovariotomy; but during the year, the works of Peaslee, Atlee, Wells, and Thomas, and the monograph of Sims, have so fully and ably set forth our present knowledge of ovariotomy, that little new could be presented on the subject. I would, however, call your attention to one point that I consider important in preparing a patient for the operation.

"Not infrequently, when called to see a patient, we find the abdomen enormously distended; the cyst containing fifty or more pounds of fluid. I would recommend the patient to be tapped, and the cyst allowed to partially refill before attempting its extirpation. By this procedure, you will enable the walls of the abdomen in some measure to contract; and thus afford you a better opportunity of supporting the abdominal viscera with your bandage after the operation, thereby lessening the shock.

"Another point, although made prominent by those authors, can not be too fully impressed upon the mind of the operator. I refer to the thorough and careful cleansing of the abdominal cavity after the removal of the cyst. To many, and especially to the beginner, this will often prove the most difficult part of the operation· After the cyst has been removed, the temptation is very great to close the wound, from the fear of exciting peritoneal inflammation. But I think you will find the most fatal and insidious complication with which we have to contend in ovariotomy is septicemic poisoning. Drainage is certainly important; but it does not and can not do away with the necessity of thoroughly cleansing the abdominal cavity of all serum and blood after the operation."

The president appointed the Committee on Ethics as follows: Drs. Bartholow, Hamilton, Bramble, Stevens, and Dunlap.

REPORT OF FINANCE COMMITTEE.

Your Committee on Finance would respectfully report, that they have examined the treasurer's accounts with vouchers, and find the same correct.

The bill of Dr. Hadlock for $50 for services, your committee do not feel authorized to allow; but would recommend that he be paid $25.

They also recommend that the annual assessment be continued at $2 per member.

As suggested by the treasurer, we recommend that all members who are five years delinquent be dropped from the roll, and not reinstated until all arrearages are paid in full.

L. M. JONES,
D. D. BRAMBLE,
E. B. STEVENS,
E. JENNINGS,
I. L. DRAKE.

After much discussion, the suggestion of the committee as to the treatment of delinquent members was laid on the table; the remainder of the report was adopted.

The question of delinquents being under discussion, on motion of Dr. Hyatt, the whole matter was referred to the Committee on Ethics, with instructions to report at this meeting.

The following additional members were elected:

NEW MEMBERS.

Calvin Pollock, M. D.; Jonathan Morris, M. D., Ironton; J. S. Bailey, M. D., Freeport; T. C. Hoover, M. D., Bellevue; Geo. S. Stein, M. D., Columbus; J. Putnam, M. D., Galion.

The society adjourned until to-morow morning at 9 o'clock.

SECOND DAY—MORNING SESSION.

The society was promptly called to order at 9 o'clock, by Vice-President Hough.

Minutes of previous meetings were read and approved.

Dr. Bartholow, from the Committee on Ethics, reported as follows:

The Committee on Ethics, to whom was referred the question of the position of delinquent members, beg leave to report.

They recommend the passage of the following by-law: "Any member failing to pay assessments for three years and upward shall cease to be a member; and all memberships so terminated may be restored on proof of proper professional conduct, and the payment of the sum of six dollars."

To meet the cases of those now in arrears, three years or more, the committee recommend that they be required to pay the sum of six dollars.

ROBERTS BARTHOLOW, *Chairman.*
A. DUNLAP,
EDWARD B. STEVENS,
J. W. HAMILTON.

On motion, the last clause of the report was made to read "in full of all arrearages" instead of "the sum of six dollars."

Report as amended was adopted.

On motion of Dr. Hough, the secretary was instructed to send a message of friendly greeting to the Pennsylvania State Medical Society now in annual convention at Carlisle, Penn.

Later in the day the following response was received:

CARLISLE, *June* 11, 1873.

The Pennsylvania State Medical Society accepts your greeting, and reciprocates it.

W. B. ATKINSON, *Secretary.*

REPORTS OF SPECIAL COMMITTEES CONTINUED.

Dr. D. A. Morse reported on dipsomania and drunkenness; Dr. J. H. Buckner on ophthalmology; Dr. R. Bartholow on nervous diseases, and Dr. W. W. Seely on the treatment of senile cataract: all of which reports were referred for publication.

ELECTION OF OFFICERS.

The election of officers for the ensuing year resulted as follows:

President—Dr. H. J. Herrick, of Cleveland.

Vice-Presidents—Drs. W. W. Jones, of Toledo; E. H. Hyatt, of Delaware; H. C. Pearce, of Urbana; A. C. Miller, of Orrville.

Treasurer and Librarian—Dr. S. S. Gray, Piqua.

Secretaries—Drs. W. J. Conklin, Dayton; T. O. Edwards, Jr., Lancaster.

Committee on Admissions—Drs. A. J. Miles, S. S. Thorn, G. W. Pullen, T. G. Vaughters, S. S. Scoville.

Society took a recess until 2 P. M.

AFTERNOON SESSION.

The society resumed its session promptly at 2 o'clock.

Drs. T. B. Harvey, R. N. Todd, and T. M. Stevens were introduced as delegates from the Indiana State Society.

Dr. Blount presented his credentials from the Union District Medical Society, all of whom were cordially welcomed by the president, and invited to participate in the deliberations of the society.

The secretary then read the following letter from Dr. E. Gray, delegate from the Illinois State Society, which was ordered to be spread upon the minutes:

BLOOMINGTON, ILL., *June* 4, 1873.

Mr. President and Gentlemen of the Ohio Medical Society:

Having been appointed a delegate to your society by the Illinois State Medical Society, I regret that I can not be present at your meeting, and bear in person the fraternal greeting of our society.

Ohio, so fortunate in geographical location, and so rich in all the products of agriculture and the mechanic arts, has long maintained an enviable pre-eminence among the Western states in medical science. We of the more distant West have received valuable contributions from your schools of medicine—young men, some of whom have already won success and fame among us in the practice of our profession. You have honorable representatives, not only in our state and medical society, but everywhere in the West where business tact and medical skill can find a sphere of usefulness.

We have watched with growing interest the efforts of those of your number, who, with laudable ambition, are pushing forward the conquests of medical science. You participate in their zeal and enthusiasm, and share their honor. In your annual Transactions we therefore always expect to find something new and valuable, and we hail the next volume you make with unfeigned pleasure.

Now that the power of the microscope is appreciated, and a better method of inquiry inaugurated, we behold unprecedented advancement, and chiefly by means of histological analysis in the science of medicine. Physiology has acquired new interest and new power. Since cells are known to constitute in their aggregate life the whole of animal life, and, per consequence, good health must depend universally upon the proper functions of these anatomic atoms, cells have naturally enough become the theme of general interest. Their study, aided by the microscope in the hands of scientific men, both in Europe and America, promises to be fruitful of the most important discoveries. Physiology, relating almost equally to biology and pathology, has entered upon a new era. By revealing more clearly the laws of life, it has made more plain the causes of disease and death. It is sweeping away many of the dark shadows that have heretofore overhung the practice of medicine, and it is yet big with promise to the intelligent physician of the future. He scarcely deserves success as a physician who has not drunk deeply at the fountain which physiology, assisted by the microscope and thermometer, not to mention other important instrumentalities, has recently opened.

It is especially gratifying to know that so much interest exists in your society on all the points involved in this great inquiry.

You will allow me to say, and we hope it is sufficiently evident, that we are in full sympathy with every effort to push legitimate experiment to discovery, and by all honorable and possible means to advance a better knowledge of the healing art—a better knowledge of medical science. Nor will it be immodest to claim that some, who came as pioneers to our broad prairies, and surmounted difficulties peculiar to life in a new country, are contributing a fair share of thought and research to the present rapid progress of science.

Hoping that your interest and zeal in the pursuit of scientific truth may never abate, and that the deserved popularity of your society and its acknowledged usefulness may continue to increase,

I am, yours,
With fraternal greeting,
E. W. GRAY.

The president now proceeded to deliver his valedictory address, which was referred to the Publication Committee, with instructions to print.

REPORTS OF SPECIAL COMMITTEES CONTINUED.

Dr. J. T. Whitaker read his report on the treatment of chronic nasal catarrh. Referred to Publication Committee.

Dr. G. E. Walton reported on the Therapeutics of Mineral Springs. Referred for publication.

DISPOSITION OF TRANSACTIONS.

On motion of Dr. Howard, the librarian was authorized to donate a complete set of the Transactions of this society to the Thomas Library at the National Soldiers' Home, near Dayton.

It was further directed that the librarian should furnish extra copies to the county and district societies through the state; said societies paying expenses of transportation.

AMENDMENTS PROPOSED.

The following amendments to the constitution and by-laws were proposed:

By Dr. Landon—Increasing the initiation fee from $3 to $5.

By Dr. Hyatt—Adopting the recommendation of the Committee on Ethics in regard to delinquent members.

By Dr. Miller—That article six of constitution shall read *two* instead of *four* vice-presidents, and *secretary and assistant secretary* instead of *two secretaries.*

In view of an urgent invitation from the Medical Society at Toledo, it was agreed, on motion of Dr. Russell, to hold the next annual meeting at Toledo on the third Tuesday of June, 1874.

Dr. Gray now read his report on quinine, which, after a lively discussion by Drs. Russel, Blount, Miller, Hyatt, and Gundry, was referred to the Publication Committee.

The following gentlemen were elected members during the day:

S. W. Fowler, M. D., Delaware; J. H. Smith, M. D., Delaware; G. W. Gardner, M. D., Harrisburg; J. E. Brown, M. D., McConnellsville; J. C. Bishop, M. D., Middleport; J. W. Welsh, M. D., Deersville; J. W. Chisholm, M. D., Mt. Perry; F. Jacoby, M. D., Columbus; D. P. Adams, M. D., Columbus; W. J. Wolfley, M. D., Columbus; E. E. Hughes, M. D., Thurman; L. F. McKenna, M. D., Junction City; S. C. Helmick, M. D., Baltimore; J. D. Nourse, M. D., Reynoldsburg; W. E. W. Shepherd, M. D., Nelsonville; J. H. Naw, M. D., Carroll; J. S. Dew, M. D., Trimble; E. V. B. Buckingham, M. D., Centerton; C. H. Reed, M. D., Toledo; A. M. F. McCollough, M. D., Bealsville.

The society adjourned until to-morrow morning at 9 o'clock.

THIRD DAY—MORNING SESSION.

The society convened at 9 o'clock. President Jones in the Chair.

On motion, the minutes of yesterday's session were not read.

The Committee on Medical Societies made the following report:

In accordance with the established usage laid down in the Transactions of this society, your committee has examined the credentials of Drs. L. F. McKenna, P. Q. Fisher, and G. F. Holston, of the Muskingum County Medical Society; the credentials of Drs. S. S. Thorn, W. T. Ridenour, J. M. Waddick, S. F. Forbes, and W. W. Jones, of the Toledo Medical Association; credentials of Drs. T. C. Smith and J. C. Bishop, of Meigs County Medical Society; of Dr. E. W. Howard, of the Medical Association of Northeastern Ohio; of Dr. McEbright, of the Summit County Society; of Dr. S. R. Voorhees, of Lebanon County Society; of Drs. S. N. Fowler, L. H. Armstrong, and J. Smith, of Delaware County Society; of Drs. A. C. McLaughlin, H. Senseman, and C. Pollock, of the Clark County Medical Society; of Dr. Calvin Welsh, of the Delaware Medical Institute; of Dr. L. F. McKenna of the Perry County Society; of Drs. Louis Schwab and T. G. Vaughters, of the Scioto County Medical Society; and find that the societies are in good standing, and are auxiliary to this society.

Further, that your committee have examined the constitution and by-laws of the Stillwater Medical Society, represented by Dr. J. M. Welch, and find that they strictly conform to the requirements of this society, and recommend that it be made auxiliary to this society.

A. C. MILLER,
LOUIS SCHWAB,
J. MCEBRIGHT,
JAMES MOORE,
E. SINNET.

TIME OF NEXT MEETING.

Dr. Landon moved a reconsideration of the motion agreeing to meet on the third Tuesday in June, which prevailing, the time of meeting was changed to the first Tuesday in June, 1874.

Dr. Herrick offered the following:

"In view of the fact that the late edition of the Medical and Surgical History of the War of the Rebellion is too small to meet the demand; and, in view of its great value,

"*Resolved*, That this society petition Congress for an increased issue of the same."

Carried.

A lively discussion now sprung up on a motion to petition the Legislature for the establishment of a State Inebriate Asylum, which was participated in by Drs. Howard, Russell, Jones, Morse, Hamilton, Gundry, and Morris.

The whole matter was, on motion, referred to a special committee, to report at next meeting. The chair appointed the following gentlemen as such committee: Drs. W. W. Jones, R. Gundry, E. W. Howard, S. M. Smith, H. J. Herrick.

On motion of Dr. W. W. Jones, the secretary and treasurer were allowed $50 for their services.

The assistant secretary was voted the thanks of the society and expenses.

The president announced the following

STANDING COMMITTEES.

Executive—W. T. Ridenour, J. M. Waddick, S. S. Thorn, W. W. Jones, C. H. Reed.

Publication—W. J. Conklin, J. B. Thompson, D. Halderman, C. P. Landon, W. W. Dawson.

Medical Societies—J. Moore, M. S. Pixley, A. C. Miller, J. H. Green, T. D. Davis.

Finance—L. M. Jones, D. D. Bramble, E. B. Stevens, E. Jennings, I. L. Drake.

Admissions—A. J. Miles, S. S. Thorn, G. W. Pullen, T. G. Vaughters, S. S. Scoville.

Obituaries—T. W. Gordon, David Cotton, E. H. Hyatt, E. Sinnet, A. Dunlap.

SPECIAL COMMITTEES.

Surgery—G. C. E. Webber.

Otology—W. W. Seely.

Physiology—J. T. Whittaker.

Monomania—D. A. Morse.

Nature of the Evidence of Spontaneous Generation—J. B. Hough.

Relation of Regular Medicine to the Pathies of the Day—W. T. Ridenour.

The Mineral Springs of this and other Countries—George E. Walton.

Stricture—A. C. Miller.

Cerebral Amaurosis and its Connection with Disease of the Kidneys—J. H. Buckner.

Pathology—E. H. Hyatt.

Nervous Diseases—Roberts Bartholow.

Puerperal Fever—W. J. Conklin.

Surgery—W. W. Dawson.

Obstetrics—T. A. Reamy.

Ergot in Puerperal Convulsions—D. J. Snyder.
State Medicine and Public Hygiene—W. W. Jones.
Epidemic Mal-presentations—Jonathan Morris.
Small-pox—A. G. Stevenson.
Epidemic Diseases—George S. Stein.
Diseases of the Heart—A. T. Keyt.
Quinine—S. S. Gray.
Puerperal Insanity—R. Gundry.
Exsection of the Hip Joint—D. D. Bramble.
Consumption in Ohio Penitentiary—N. Gay.
Ovariotomy—A. Dunlap.
Urinalysis—J. W. Russell.
Electrolysis—W. H. Mussey.
Functions of the Spleen—S. S. Scoville.
Skin Grafting—T. D. Davis.
Chronic Diseases of the Lungs—W. Carson.
Sanitary Science—J. R. Black.
Gastric Irritation—E. Sinnet.
Castration for Epilepsy—M. S. Pixley.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION.

A. B. Jones, Portsmouth; H. J. Herrick, Cleveland; J. W. Hamilton, Columbus; L. Schwab, Portsmouth; J. Moore, Ironton E. H. Hyatt, Delaware; D. A. Morse, Cross Roads; G. C. E. Webber, Cleveland; H. L. Conklin, Sidney; E. Jennings, Dayton; J. C. Reeve, Dayton; J. B. Thompson, Columbus; W. W. Dawson, Cincinnati; P. S. Conner, Cincinnati; E. B. Stevens, Cincinnati; J. T. Whittaker, Cincinnati; R. Bartholow, Cincinnati; A. Wilson, Sidney; Geo. S. Stein, Columbus; A. T. Keyt, Walnut Hills; W. W. Jones, Toledo; L. M. Jones, West Liberty; J. D. Cotton, Marietta; R. Gundry, Athens; W. H. Phillips, Kenton; J. M. Waddick, Toledo; J. H. Rogers, Springfield; A. Dunlap, Springfield; E. Sinnet, Granville; W. P. Kincaid, New Richmond; J. B. Hough, Ridgeville; J. W. Russell, Mount Vernon; J. R. Black, Newark; T. G. McEbright, Akron; T. O. Edwards, Jr., Lancaster; S. S. Gray, Piqua; J. W. Hadlock, Cincinnati; D. D. Bramble, Cincinnati; A. C. Miller, Orrville.

DELEGATES TO STATE MEDICAL SOCIETIES.

Indiana—W. H. Mussey, S. S. Scoville, R. Bartholow, E. B. Stevens.

Kentucky—W. W. Dawson, J. H. Buckner, A. T. Keyt, E. H. Hyatt.

Illinois—S. S. Gray, C. P. Landon, T. H. Kearney, S. M. Smith.

New York—J. A. Murphy, P. S. Conner, D. D. Bramble, J. W. Hadlock.

West Virginia—J. C. Bishop, L. M. Jones, T. D. Davis, A. B. Jones.

Kansas—J. P. Bing, W. W. Seely, A. J. Miles, J. W. Russell.

Dr. L. M. Jones introduced the following resolutions:

1. That the thanks of the society are due to the retiring officers for their ability and impartiality.

2. That our cordial thanks be tendered to the profession of Columbus for their kindness and interest in our behalf while here, and especially to the Executive Committee for their thoughtful attention and magnificent hospitality. "May they live long and prosper."

The Twenty-eighth Annual Meeting of the Ohio State Medical Society was now declared at an end. The society adjourned to meet in Toledo on the first Tuesday in June, 1874.

A. B. JONES, *President.*

W. J. CONKLIN,
T. O. EDWARDS, JR.
Secretaries.

CLARKE COUNTY MEDICAL SOCIETY.

Reported by Dr. ISAAC KAY.

This society met on Thursday afternoon, June 5th, Dr. J. H. Rodgers, president, in the chair. Members present—Drs. Bryant, Pollock, Kay, Hazard, McLaughlin, Nelson, Reeves, J. H. Rodgers, Senseman, and Totten.

Dr. Senseman made a verbal report upon the late meeting of the American Medical Association held at St. Louis. Drs. Senseman and McLaughlin were representatives from the Clarke County Medical Society to that body. Dr. S. remarked that there were about four hundred members present at St. Louis. An immense amount of business was transacted. Able addresses were made by the retiring president (Dr. Long, of California,) and many others. Much harmony prevailed, and, taking it all together, the meeting was one of great pleasure and profit to all the lovers of medical science who were present.

Dr. McLaughlin also made remarks upon the same subject. Dr. Toners, of Washington City, was elected president for the ensuing year, and Detroit, Mich., was selected as the next place of meeting.

Dr. Bryant reported a case of what he considered hydatids. This case was thoroughly discussed by Drs. Bryant, Reeves, and J. H. Rodgers.

Dr. Senseman reported a case of cerebro-spinal meningitis occurring in his own practice within the last ten days. There was torpor of the liver and general stupor connected with the earlier stages of the disease. Then the cerebral symptoms set in more fully until the child died after an illness of ten days.

Dr. Bryant thought that in all cases of cerebral meningitis there should be an action of the skin produced if possible. Some of the combinations of opium are very valuable in the treatment of this disease.

Dr. McLaughlin regarded cerebro-spinal meningitis as one of the most intractable and mysterious diseases with which he ever contended. He thought there was vast room for improvement in the knowledge which the profession now has upon the pathology and therapeutics of cerebro-spinal meningitis.

Dr. J. H. Rodgers remarked that he had occasion to feel a deep interest in the subject introduced by Dr. Senseman. Whilst many cases presented clear and unmistakable symptoms, there were others again where it was difficult to make out a correct diagnosis. Oftentimes a case appearing to be simple and uncomplicated disease, other than cerebro-spinal meningitis, will very suddenly and unexpectedly develop itself into all the characteristics of the last-mentioned affection. Dr. R. then proceeded to relate the particulars of one or two cases of cerebro-spinal meningitis occurring in his own practice, since the meeting of the society.

Dr. Reeves thought there was more trepidation in communities about this disease than there should be. There were not so many cases of spinal disease as the people think. The most usual and common pains in the head, neck, and back were nearly all looked upon as cerebro-spinal meningitis; and oftentimes unnecessary fears were entertained. The splendid monographs which have been written within the last twelve years upon this disease enable any studious medical man to master its pathology and diagnosis.

Of course the medical profession have nothing which might be considered as a *specific* remedy. There is no *certain* cure, but there are general principles of treatment, which, if properly carried out, will prove nearly as efficient as in many of the other prevalent diseases of the land. The disease consists essentially of an inflammation of that portion of the nervous center near the junction of the brain and spinal marrow.

Dr. Reeves offered some remarks upon croup. He regarded this as one of the most important diseases of the country, because of its frequency and because of its severe character. He believed croup to be a species of angina. The proper name is cynancha trachealis. There is congestion of the mucous lining of the trachea eventuating in inflammation of those parts. There is an exudation of a substance upon the inner surface of the tracheæ, forming itself into a false membrane. The first duty of the physician upon seeing a case of croup is to distinguish between true and pseudo or false croup. Dr. R. enlarged upon the diagnosis between these two varieties of croup.

Mr. McLaughlin gave a minute description of croup, and spoke fully of the pathology of this disease. Distinction should always be made between *spasmodic* and *inflammatory* croup. Dr. M. used ipecac and sanguinaria. He said that the latter remedy had a specific effect aside from its emetic qualities.

The subject of croup was continued to the hour of adjournment.

The society then adjourned to meet on the second Tuesday in July.

A Madame Bres lately passed her first examination for the Doctorate of Medicine in Paris, and the secretary of the faculty appended the following particulars to her certificate: "Madame Bres, married, and the mother of two children, has not taken to the study of medicine as a pastime, nor from scientific vanity. She practices all the duties of the profession. During the two sieges which Paris has so lately borne, she never quitted the bedside of the wounded. The rain of honorary distinctions poured upon the ambulances passed by without falling upon her; the devotion natural to woman needing neither stimulus nor flattery."

Correspondence.

BOSTON, MASS., *June* 10, 1873.

MR. EDITOR:—The annual convention of the Massachusetts Medical Society was held June 3d and 4th in this city. The morning of the first day was spent in visiting the hospitals of the city, to witness surgical operations and the exhibition of patients. At twelve o'clock the society came to order, and papers were read on the following subjects. I give you a few brief extracts of the remarks of the speakers, as reported in the *Boston Advertiser:*

The first paper was by Dr. Lewis S. Dixon, of Worcester, on "Improvement in the Treatment of our Ophthalmic Cases." It treated of diseases of the eyes, and stated the proper remedies to be applied. He urged the necessity of observing closely the beginning of eye diseases, and not pass them by as simply inflammatory troubles. A brief description was given of the best way to make an accurate examination, the use of oblique light and the ophthalmoscope.

The next paper was that of Nathan Allen, M. D., of Lowell, on "Hereditary Disease." He first spoke of the general admission of all medical men that there was a class of diseases which were hereditary. Scrofula, consumption, and rheumatism he placed first in this class. Examples to illustrate the transmission of abnormal or defective organism were given and noticed. The question was then discussed whether morbid conditions of the body or physical habits could also be transmitted, the paper taking the ground that all qualities were transmissible, and sometimes in an intensified form. It referred to the great advance that had been made in the knowledge of the cause of disease, and to pathology, the comparatively new department of medicine. A true knowledge of the cause of a disease was indispensable to its successful treatment or prevention. He maintained that there was a great law of propagation and of inheritance founded in nature, and that by understanding them a far better knowledge of all diseases could be obtained. Let the community be properly enlightened, he said, in respect to the responsibilities and duties of the marriage relation, and not many generations would pass before disease would be greatly diminished, life prolonged, and the rate of mortality lessened. It would affect most sensibly the interests and business of the medical profession, while the public would gain far more than what was lost.

Dr. John O. Webber read the last paper of the morning. His subject was, "Children's Diseases in Massachusetts." The diseases of infants, he thought, were not receiving a proper amount of professional attention. The proportion of infant mortality in 1870 to 1,000 was 6.77. In eleven cities, for every 1,000 inhabitants 9.02 died. Between 1865 and 1870 the proportion was 6½ to every 1,000. Of no class of sins was it truer than of sins against the laws of health, that the iniquities of the parents were visited upon the children; and while so many parents habitually violate every hygienic precept, children would continue to be born only to die in infancy. Residence in the city was as healthy as in the country for children. The best districts in Boston had a remarkably low rate of infant mortality. Eighteen per cent. occurred from improper food. Improper clothing was also the cause of many deaths.

At the close of the paper the meeting adjourned to three o'clock.

The meeting was resumed at three o'clock, Frederic I. Knight, M. D., of Boston, read a paper on "The Treatment of Growths in the Larynx with the aid of Laryngoscope." He gave an extended description of the various instruments invented and used in removing the growths. He preferred those of Schroeter.

Dr. Frederic Winsor, of Winchester, spoke of the duties of physicians to nurses. The general ignorance that prevailed among nurses of the cause and theory of diseases was deplored, and the need of some plan by which they could receive instruction and training that would make them qualified to perform their responsible duties. In this connection Dr. Bowditch, of Boston, offered the following resolution, which was adopted:

"*Resolved*, That a committee of nine be appointed to urge on the great hospitals of Massachusetts the importance of establishing, in connection with these institutions, schools for nurses similar to that in St. George's Hospital, London, and more recently in similar institutions in New York."

The committee was appointed by the chair, and consisted of Drs. Winsor of Winchester, Bowditch of Boston, Wheeler of Chelsea, Pierson of Salem, Fiske of Northampton, Gage of Worcester, Holmes of Milton, Nickerson of Lowell, Stone of Belfast.

Dr. Gurdon Buck. of New York, who has devoted special study to the subject of reparative surgery, gave an interesting description of his treatment of two cases which had received particular attention. One was the restoration of a portion of a nose and ear to their normal condition, and the other of a face and hand that had been distorted by a burn. A vote of thanks was given to the doctor for his instructive lesson.

Alfred Hosmer, of Watertown, read a paper on "Life and Disease," in which he made the bold assertion that half the people in the world committed suicide, that is, they abused their physical system till premature death was the result; and that nearly the other half died from homicide, that is, they inherited the diseases formed as described above.

J. F. Alleyne Adams, M. D., of Pittsfield, read an elaborate article on the Pneumogastric.

Dr. M. E. Webb, of Boston, read the "Report on the Late Epidemic of Small-pox" in this city. The doctor did not enter into any scientific discussion of small-pox, but gave a report of the origin, progress, abatement, and general management of the disease, commencing January 1, 1872, and ending May 1, 1873. He spoke of the insufficiency of hospital accommodations, and of the neglect of the city government to furnish them, and to appoint a board of health in the year 1872. From this neglect, and the improper manner in which vaccination was being done, of course the disease made rapid strides in many parts of the city. From the commencement of the present year I will let the doctor tell his own story:

"In time a new city government was formed, and fortunately for Boston it consisted mostly of new members. They, fully alive to the emergency, and encouraged by the heroic action of the mayor, who knew his duty and dared to act, did what the old city government had six months repeatedly refused to do—namely, established a board of health independent of party. One of the first official acts of this board was to take possession of the Roxbury almshouse as a hospital. This proved capacious enough, with the one on Swett street, to meet any demand, and at last there was a place where people were willing to go and be made comfortable; where judges could go without disgrace and be satisfied. A corps of vaccinators was immediately organized and made responsible for the vaccination and revaccination of all classes. The result was highly satisfactory; the disease rapidly subsided under the combined effects of isolation and vaccination, and in three months the epidemic was conquered and public confidence restored. Having thus attended to the rise and fall of the disease, we will add a few statistics bearing upon it, as well as to substantiate assertions made. They are taken from the registers of hospitals in this city, from Gallop's Island, the health office, and from necessity are somewhat faulty. The only record of those not removed is the bare fact that they had small-pox, and the city registrar's office shows that nearly one-third of them died. The number of cases reported during the time embraced in my report was 3,722; the number of deaths, 1,026, or a per cent. of 27.56. These figures are sufficiently large to show the severity of the epidemic, exceeding the percentage of either New York or Pennsylvania death-rates. Its usual virulence is also shown by the large number of hemorrhagic form, or 7.58 per cent., all of which proved fatal. There was a still larger proportion among those not removed, but allowing the same per cent. for the whole number of cases, we have 282 deaths from this most fatal form of the disease. It occurred most frequently in vitiated constitutions, though that was not always the case. Male and female suffered equally. The middle-aged seemed more liable to this form than the old, while it has been very rare in children, in fleshy people rather than in those emaciated. The prodrometa was generally more marked than the milder or even severe forms. Extreme prostration came on rapidly, followed by an erythema over the entire body, assuming a lobster-red color, conjunctiva injected with blood, with here and there papulæ, or, later, vesicles filled with bloody serum, characterizing the disease. It has not proved so contagious as milder forms. The diagnosis was in some cases difficult, and the characteristic appearances would not become evident till the patient was in a dying condition, or even dead, and sometimes discovered then only by diligent search over the entire body. The remarkable activity of the poison was still further attested by the unprecedented large number of recurrent cases, having personally witnessed thirty-eight cases who presented scars of former victories, three of whom had the disease twice within three months. Of those treated in the three hospitals in city limits, sixty per cent. were American-born; fifteen per cent. from the British provinces; fifteen per cent. from Ireland, and ten per cent. from all other parts of the world; the death-rate being about in the same proportion. The number of males treated was 538, the number of deaths, 127—per cent., 23.60; number of females treated, 180; number of deaths, 58—per cent., 18.83, showing a difference of 4.77 per cent. Nearly one-half of those unvaccinated died; of those vaccinated 29.21 per cent. died; of those revaccinated the death-rate was 17.85 per cent. As showing the value of the vaccine scar, out of 413 treated in these hospitals 53 died; out of 103 having two scars, 8 died; out of 36 having three or four scars, none died; of those having five scars, two died. Vaccination is the only preventive known, but has not proved an entire safeguard, as proved by the number of recurrent cases among those vaccinated in infancy From the fact that those vaccinated and revaccinated have had the small-pox, the conclusion must be arrived at that there are persons so susceptible to the influences of variola poison that no amount of vaccination, or previous attacks, would prevent the disease if these persons were exposed to the contagion. As regards the scar, from many observations among patients, doctors, and nurses, the conclusion is reached that vaccination may protect without any external evidence whatever. A scar is not a test of thoroughness of immunity. The protective power of animal over humanized virus is very much greater. The speaker favored animal virus as not conveying syphilitic diseases, which undoubtedly occurs, though not as often as is commonly supposed. In the Albany Street Hospital, which was open six months, the number of cases treated was 322; number of deaths, 76. The highest mortality rate was at the island. The number transported was 487; number of deaths, 182. The next largest death-rate was among those not removed. Number treated at home, 2,432; number of deaths, 659—per cent., 27.09; which was 1.25 less than the island percentage, and over it the Albany Street Hospital had an advantage of 3.5 per cent. At No. 1 (Swett street), 233 cases were treated, and the number of deaths was 49—percentage, 21.02; being 18.57 less than the death-rate of the island, 7.07 less than that of those not removed, and 2.58 less than those at Albany street. The lowest rate was at the Marcella Street Hospital in the old Roxbury almshouse. The number treated there was 291; number who died, 60—percentage, 20.05, or one per cent. less than the Swett Street Hospital; 3.55 per cent. less than at Albany street; 7.04 per cent. less than among those not removed, and 19.54 per cent. less than among those at the island. The treatment best calculated for the cure of the infection is to have a hospital located on high, dry, and healthy land, with high, well-ventilated, and properly warmed rooms, insuring comfort and happiness to the patients. A proper classification of the disease should be rendered practicable, where the most delicate and sensitive can be so separated from the wards that they will not be continually shocked by scenes of suffering and death. Most of the patients are in the second stage or that of eruption, on admission, and require little or no treatment except an opiate at night (as sleep is of great importance), and some mild laxative to keep the bowels in soluble condition. In the severer forms quinine has been given early and through every stage of the disease, thus keeping the temperature low and harboring strength for the suppurative stage. During the secondary fever quinine in large doses is given, milk-punch, brandy, beef-tea, and opiates, generally sulphate of morphine. Patients have never been without milk, and have taken it at pleasure. Grapes, oranges, apples, etc., have been rationed out daily in all stages of the disease. In the hemorrhagic form the same course has been followed, with the addition of ergot, muriated tincture of iron, tannic acid, and other astringents; but none of them have been of benefit. Complications of the disease were treated upon general principles, never forgetting that the vital powers must be sustained. Ulcerations of the cornea were treated by frequent cleansing of the eyes, applying weak astringent lotions, and keeping the pupils well dilated with atropine. In the third stage it has been considered, as a cry of debilitated nature, necessary to give milk-punch and beef-tea. To prevent pitting, various methods have been tried. If the ulcerations extend deeply into the skin, nothing will prevent cicatrices remaining. Latterly the treatment was emollient applications and frequent sponging with tepid water. The hospital solution to prevent itching, was carbolic acid, half a drachm; glycerine, half an ounce, with olive oil; mix and apply with a soft brush. The disinfectant used was carbolic acid, the best in destroying all odor. The wards were sprinkled with the solution; it was applied to the beds and bedding in a powder made by rubbing up the acid with magnesia. The earth and water-closets were kept free of all odor by lavish use of carbolic acid. Bromo-chloralum has an advantage of being nearly odorless, and in private rooms where there was only one patient, answered every purpose; but in wards it is inferior to carbolic acid. Fumigation has been performed by burning sulphur and strongly saturating the beds and bedding with the fumes of sulphuric acid. The necessity of a good, permanent, and well-organized hospital, always at hand for an emergency, can not be too strongly urged. A good hospital, maintained for five years, even at an expense of $5,000 or $10,000 a year, would be economy. The past epidemic teaches the importance of having a competent board of health, unbiased by political tinkerers or party influence. If Boston had had such a hospital, or even had availed itself of the Roxbury almshouse, she would never have been scourged by the late epidemic, which has cost over one thousand lives; incurred an expense counted by hundreds of thousands of dollars, to say nothing of consequential damages to business, the anxiety of every househould which dollars and cents can not estimate; and saved herself the standing reproach of hundreds of municipalities, not only in Massachusetts, but all over New England, who have suffered from this disease, and trace the source of contagion directly to the carelessness and neglect of Boston alone."

Hired Nurses the Best.—Dr. S. Wier Mitchell, in a recent article in *Lippincott's Magazine*, says most truly: "What you want in the sick-room is a calm, steady discipline, existing but unfelt; the patient, cool control, which a stranger is far more apt to exercise than a relative. In a word, just as a doctor feels it unwise to attend alone his own dear ones in grave illness, for like, but lesser reasons, the best nurse is a stranger—one who is naturally free from worry and irritation, who is unmoved by traditions of love, and who, acting purely and simply from sense of duty, takes that care of her own health, which is essential to make her nursing perfect. Such an attendant is willing to take her share of sleep and fresh air, and so remain cool and tranquil under all circumstances and in all exigencies, making far more light the task of the doctor, and able from experience of illness to note changes and call for aid at needed times. Such help excludes from the sick-room that host of little annoyances for doctor and patient which I may call 'fuss.' Most doctors will agree with me that, save in cases of infants, where the mother can not and should not be displaced, the best nursing is paid nursing, and the worst very often that which comes from the family."

Selections.

*Longevity and other Biostatic Peculiarities of the Jewish Race.** *By John Stockton Hough, M. D.*—Each race, nation, class, and family of people have physical, moral, and spiritual peculiarities and immunities which always differ in degree, and often in kind, from every other race, nation, class, and family; and had we the statistical data for comparison, it is more than probable that we should find this difference quite marked in several particulars, though I scarcely think it would be found so distinctive and decided as the uniformly defined differences between Christians and Jews.

These differences, I am persuaded, are not only to be attributed to a difference in physical constitution, but to differences in morals, habits, customs, occupations, observances, traditions, all of which may in some degree affect biological phenomena.

The kingdom of Prussia has kept for a greater number of years than any other, reliable statistics of the Jews† and Christians in its domains, and made the comparisons which enable them to appreciate their value as subjects. M. Legoyt‡ has analyzed these statistics for the period from 1825 to 1861 (period 1849 to 1852 excepted). He finds the increase always surpassess that of the general population—and, above all, by the excess of births* over deaths: if there are fewer adults, there are more aged. The proportion of sexes is 103.37 women to 100 men, in place of 100.72 women for 100 men in the general population.

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*NOTE.—The writer of this article deems it proper to state that he was induced to compile it through the kind invitation of the editor of this department of the *Record*, and has not sought to appear in the gratuitous position of an "elegant apologist" of the Jewish race, but merely to bring together from various sources the facts as he finds them, solely for the benefit of science, hoping that Christians who are not blinded to the advantages arising from keeping the Mosaic Laws may take heed and profit by example. He regrets that he has not, from the very short space allowed and time allotted, been able to collect more facts, and arrange them in a more acceptable manner.

†There are about 7,000,000 Jews living in the world at the present time. Their density is independent of society, religion, or government. There is 1 Jew to every 446 inhabitants in England, 1 in 486 in France, 1 in 42 in Russia, 1 in 33 in Austria, 1 in 105 in Germany, 1 in 61 in Turkey, and 1 in about 58 in Europe. There are probably 75,000 Jews in the United States, or 1 to every 500, of which between eight and nine thousand are in Philadelphia, or 1 to every 100 inhabitants.

‡Journ. de la Société de Statistique de Paris, de Juillet et d'Août, 1865.

The occupations are as follows:

	General Population.	Jews.	
Agriculture, gardening, and agricultural industry.......	42.53	2.18	per ct.
Industry..	39.41	18.37	"
Commerce..	5.17	57.33	"
Domesticity..	3.25	6.73	"

In industrial professions and commerce we see 75.70 per cent. of the Israelites.

Marriages Rare.—According to statistics in Prussia, marriages among Jews are more rare than among other religionists, as may be seen from the following statements (from Levy,† p. 17).

INHABITANTS TO ONE MARRIAGE.

Years.	Evangelists.	Catholics.	Israelites.
1831..................	129.21	136 62	155.12
1834..................	102.76	103.99	129.94
1837..................	110.02	109.38	142.20
1840..................	112.08	113 61	127.58
1843..................	107.97	113.19	123.21
1846..................	112.36	122.93	134.54
1849..................	107.77	111.40	174.92

Dr. Glatter‡ has found the same to be the fact among the Jews of Wieselburg, in Hungary. In Saxony there was one marriage among 113 Israelites, and one among 103 Christians. In Tuscany, for the year 1861, one to 103 Christians, and one to 141 Israelites. In some countries this lessened frequency of marriage among Jews was in some degree due to restrictions of municipalities and governments, which did not allow an Israelitish marriage unless the contracting parties could show some palpable means of maintaining themselves in their new social state.

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*The Talmud says of the command to increase and multiply. "Who neglects this precept commits a homicide, and it is the cause for which God abandoned Israel." The Talmud also recommends not to espouse a woman who is defective, and that the best age for marriage is thirty years.

†De la Vitalité de la Race Juive en Europe, Annales d'Hygiène Pub., etc., t. xxv, 2d Série, 1866, and Pamphlet. Paris, 1866. pp. 30.

‡Annales d'Hygiène Pub. et Med. Leg., t. xxiii, 2d Série, p. 223.

This, however, has mostly disappeared, and the difference between the frequency of marriage among Jews and Christians is probably due to custom or habit of these people, who probably make better preparations to meet their obligations than Christians, in addition to the larger proportion of children and the aged among Jews, which renders the proportion of the population, capable of contracting matrimony, sensibly less.

Fecundity.—Following Lévy; not only do Israelites marry less, but they have fewer children, fewer still-births, fewer deaths among the children born alive. From the documents in Prussia, there were 29.97 inhabitants for one birth, while among the Christians it only required 25.21 persons from which to recruit one birth annually.

I would suggest that were the above facts the only ones upon which the lesser fecundity of the Jews was based, I should think the conclusion—in view of the facts already mentioned, viz., that there are more marriages, consequently a greater proportion in state of matrimony; more deaths among children of Christians, consequently a larger proportion of adults, that is, persons capable of contracting marriage, besides the larger proportion of aged—as unwarranted in the premises, and of necessity erroneous, in degree at least—which last-named position is corroborated by Henke,* who says that in Prussia, Christians have 4.3 children to each marriage, and Israelites 5.2; while another writer† says that in this monarchy for the years 1820 to 1825, the Christians had 5.35 children to each marriage and the Israelites 4.78.

At Furth, an average for twenty-five years gives one marriage to every 128 Christians, while Jews number 149 to one marriage. Among Christians it required but 29 inhabitants to recruit one birth, while among Jews it required 35.

Age at Marriage.—In marriages the age of Jews is more advantageous than Christians. Of 100 persons—

Only 29 Christian men were under 30 years of age.
While 37 Jewish " " " "
Only 54 Christian women " " "
While 69 Jewish " " " "

Under 25 years of age there were, in 100 marriages, 26 Christian unions and 45 Jewish unions.

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*Zeitschrift fuer die Staatsarzneikunde, t. xii, p. 230.

†Babbage, Edinburgh New Philos. Journ., v. 1.

In 1,000 marriages in which the man was less than 45 years, the woman less than 40 years, there were 746 Christians and 782 Jews; in which the man was less than 60 years and the woman less than 45, there were 212 Christians and 170 Jews; in which the man was more than 60 years and the woman more than 45, there were 42 Christians and 48 Jews.*

Children—Excess of Male Births.—One of the most marked and unvarying physical peculiarities of this race, is the much larger proportion of boys among the births than among Christians in the same places living under the same circumstances. I have collected with much care, from various sources, the following facts, and brought them together in tabular form as seen below:

PROPORTION OF SEXES AMONG BIRTHS OF ISRAELITES.

Country.	Period.	Whole Number.	Boys to 100 Girls.
Israelites in Prussia†		(5,318 boys and 4,682 girls)	113.00
" " "	1827	(2,956 " " 2,624 ")	111.00
" " "	1820-5‡	(12,454 " " 11,029 ")	112.92
Christians" "	1820-5‡	(842,894 " " 794,580 ")	106.08
Israelites ". Berlin 16 years§ in succession, anterior to 1820		(528 boys and 365 girls)	144.65
Israelites in Breslau, 1782 to 1800‖			114.00
" " Leghorn¶			120.00
Christians" " ¶			104.00
Christians, legitimate, in Prussia**			106.07
" illegitimate, " "			103.60
Jews, legitimate, " "			109.36
" illegitimate, " "			101.19

The greater proportionate number of male births among Jews may be in some degree influenced by the age of the parents at the time of marriage, as Jews marry younger than Christians; it is in some degree due to a better physical constitution, which they undoubtedly inherit, or they would not live so much longer than

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*On the number and increase of Jews in the Prussian States, etc., by C. R. Weld, trans. from M. Hoffmann.

†Henke, Zeitschr. f. d. Staatsarz., t. xii, p. 230.

‡Babbage, Edinburgh New Philosoph. Jour., v. 1.

§Hufeland's Jour. f. d. Praktischen Hailkunde, 1820, p. 11, ext. in Burdack's Physiol., v. 11, p. 275.

‖Correspondenz der Schlesischen Gesselschaft f. Vaterlandische Cultur, t. i, p. 58. ¶Valentin.

**Boudini, Annales d'Hygiéne Pub., v. xliv, 1850.

Christians; but most of all is this decided peculiarity due to the observance of certain Mosaic laws (Levit., c. xv; 19, 28), which physiologists have not failed to recognize.

Sexes in the Population.—What is most remarkable in reference to the proportion of sexes, is the fact (if a fact, as stated by Lévy) of there being a smaller proportion of males *of all ages* among the Jews than in the general population, while the former have uniformly such a large excess of male births. Jews have an excess of males at birth amounting to nearly 18 per cent., while the general population have only 6½ per cent.; yet, notwithstanding this, if all ages be taken in the population, Jews have 3.25 per cent. fewer males than females, while the general population have only 8 per cent. fewer males than females. This difference is certainly greater than could be accounted for by a difference in emigrations in favor of males, and is probably due to greater proportionate mortality among Jewish male infants, or greater longevity of their females; probably the latter.*

Menstruation.—Raciborski† has determined that different races begin to menstruate (reach puberty) at different ages, which indicates that some races develop with greater rapidity than others, and it is probable that this difference in the time of development may affect the probability of life. He found that 70 noble women began to menstruate at 13 years, 1 month, and 5 days; 100 Hebrew women, at 14 years, 3 months, and 25 days; 200 Slavonic women at 15 years, 3 months, and 9 days.

Immunity from Diseases.—Dr. Glatter (Directeur du Bureau de Statistique á Vienne), in his paper on "The Influence of Race on the Duration of Life,"§ gives the following table illustrative of the relative frequence of disease among different races in the same locality.

	Number ill.	Number to 1,000 inhab.
Magyars	6,034	533
Germans	3,806	223
Slavonians	1,522	182
Servians	252	28
Jews	1,540	32

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*The author will enter more fully into this subject in a forthcoming article on "the Relative Viability of the Sexes."

†Traitê de la Menstruation, Paris, 1868, 8vo, p. 630.

§Das Racenmoment in seinen Einfluss auf Erkrankungen. Casper's Vjsch, 1864, t. xxv, p. 32–45.

The Jews present a remarkable immunity from intermittent fevers, convulsions, and tabes mesenterica of children, and from plegmasiæ of the respiratory organs. They give, on the other hand, higher figures for *gale* and other apyretic cutaneous affections, also for gastro-intestinal catarrhs and hernias.

According to Boudin,[*] the first epidemic of cholera fell heavily on the Jewish race.

They have had in recent times a very marked immunity from the plague, which was so noticeable that it was the motive of odious persecutions.

Tschudi,[†] in speaking of the plague of 1346, says that this malady did not affect the Jews of any country. Fracastor mentions the fact that the Jews escaped completely the epidemic of the typhus of 1505. Rau[‡] mentions the same immunity from typhus observed at Langeons in 1824. Ramazzini insisted on the immunity of Jews from the intermittent fevers observed at Rome, 1691.

Degner says the Jews escaped, in 1736, the epidemic of dysentery, of Nimègue. Michel Lévy makes the remark that this immunity was manifest at the same time in the French and in the Israelites.[§] M. Eisenmann insists on the extreme rarity of croup in the Jewish children.

The inquiry made in 1843 by the Prussian government in certain cities in the Grand Duchy of Posen, found that in several localities there existed a malady affecting the hair, of which the following races were attacked in the proportion indicated by the numbers set opposite them:

1	in every	33	individuals	of the	Slavonic	race.
1	" "	65	"	"	Germanic	"
1	" "	88	"	"	Jewish	"

The *Comptes Rendus* of the Minister of War gave for the civil population of the cities of Algeria the mortality below:

	Deaths for 1,000 inhabitants.	
	1844.	1845.
Jews	21	36
Mussulmen	32	40
Europeans	42	45

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[*] Etudes de Pathologie Comparée, in Annales d'Hygiène Pub. et Med. Lég. 1849, v. 42 p. 59–61.

[†] Iselin. Schweizer Historie, 1734.

[‡] Rau, über die Behandlung des Typhus. Heidelb. Klin. Ann., B. ii, 1826.

[§] Traité d'Hygiène, v. ii.

According to Dr. Stallard, in his work on "London Pauperism," Jewish children have no hereditary syphilis, and scarcely any scrofula. Their greater tenacity of life is therefore not only due to better maternal care and nursing, but to the inheritance of a better physical constitution than the Christian child.

Duration of Life.—M. Lévy estimates that the mean average duration of life among Jews exceeds that among Christians by about 5 years. In Prussia, the civil records indicate 1.61 deaths to 100 living Jews, while for the general population of the entire kingdom it is 2.62 for 100; from which it follows that the population increases by 1.63 for 100 among Christians, and 1.73 among Jews per year. The effect of this is to double the Christian population in 51 years, while the Jews would double in 40.5 years. In 1849, Prussia computed one death for—

Evangelists.	Catholics.	Jews.
34.35 inhab.	30.18 inhab.	40.69 inhab.

M. Legoyt has constructed for France (from 1855 to 1859, 5 years) a table of mortality with the deaths by ages of Jews and of the total population, from which he deduces the following conclusions:

1. At birth, the mean life of the general population rises superior to that of the Jewish population (men). 2. At all the other ages the advantage appertains to the Jews. 3. As for the Jewish women, their mean life does not attain to that of the general population of the same sex until the age of 60 years; but in parting from this limit they become superior.

Dr. Stallard, in his work on "London Pauperism," says that the mortality among Jewish children from 1 to 5 years of age is only 10 per cent., while among the Christians it is 14 per cent. The average duration of life of the Christian in London is 37 years; of the Jew, 49 years. (Extract in *Philadelphia Medical Times*, December 1872, p. 178.)

Deaths among 100,000 individuals:

Mortality.	Christians.	Jews.
Still-born	143	89
Under 1 year	697	459
1 to 5 years	477	386
5 to 14	202	151
14 to 25	155	123
25 to 45	334	231
45 to 70	614	392
70 and above	239	330
All ages	2,961	2,161

Of 100,000 children :—

	Christians.	Jews.
Still-born	3,569	2,524
Under 1 year of age	17,413	12,935

M. Mayer, in his treatise* relative to the duration of life in the Jewish population compared with that of the Christian, found the following facts connected with the statistics of Furth for a period of 10 years:

MEAN AVERAGE DURATION OF LIFE.

Jews, 37 years; Christians, 26 years; excess in favor of Jews, 11 years.

From one to five years old, Jews lose 10 in 100, Christians 14 in 100. This difference holds to the 60th year, but then the difference changes in favor of Christians. From 60 to 70 years, Jews lose 9.8 in 100, and Christians 12 in 100; 70 to 80, 8.9 in 100 Christians, 7 in 100 Jews; 80 to 90 years, 2.4 Christians in 100, and 8.1 Jews. This result, he says, is not astonishing, since of those who pass 60 years, more individuals of the Jewish race than Christians are living. Among the Christians one-half die before 30 years, while one-half of Jews live to 50 years. In France, Dr. Neufville has reached analogous results.

The mean general mortality is	37 yrs.	7 mos.
Christians, " " "	36 "	11 "
Jews, " " "	48 "	9 "

In the first five years of life, of 100 children of Jews, 12.9 die; of 100 children of Christians, 24.1 die. Among 100 Christians, 38.1 attain to 50 years, and 54 among Jews. 13.4 Christians attain to 70 years, while 27.4 Jews attain the same age. One-quarter of Christians attain only 6 years, 11 months; and one-quarter of all Jews, 28 years 3 months. One-half of all Christians die at 36 years; Jews, 53 years, 1 month. There is only one-quarter of the Christian population of Frankfort living, above 59 years, 10 months, while among Jews one-quarter pass 70 years. Dr. Neufville explains these differences by the following circumstances: There are no proletaries among the Jews, while one-tenth of the Christians live on public charity. Most Jews are in commerce or letters, very few are laborers. Among 100 commercials above 20 years of age, the one-half of the Christians succumb before 57 years; one-half of Jews before 67 years only.

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*Ueber die Lebenserwartung der Israelitischen Bevölkerung gegendi ber der Christichen. Deutche Zeitchr. f. d. Statistik, t. xxi, p. 2, 1863.

It is in this longevity that the Jews increase more than Christians, and not in marriages and births. In Prussia the Jewish population (1822–1840) increased 34½ per cent., while in the same lapse of time Christians augmented only 28 per cent., increase by immigration being about the same. There was one birth to every 28 Jews, one to every 25 Christians; one marriage among every 139 Jews, one among 112 Christians; one death among 40 Jews, one in 34 Christians.

Increase in population among 100,000 individuals:

	Christians.	Jews.
Marriages	893	719
Births	4,001	3,546
Deaths, still-births included	2,961	2,161
Excess of births over deaths	1,040	1,385

According to Lévy, in a mortuary table brought to 1,000, and which embraced a period of 23 years (1833 to 1855), Dr. Glatter compared the following named races with the Israelites, with the result annexed:

	Mean duration of Life.	Probable duration of Life.	Among 1,000 Descendants, No. living from 70 to 100 years of age.
Germans	28.50	21.30	86.7
Hungarians	23.11	10.10	54.4
Croats	22.10	4.80	70.6
Jews	30.20	22.30	120.9

Suicide.—Statistics show that Jews commit suicide much less frequently than other religionists, as the following table from Lévy (out of Legoyt) will show.

Among 1,000,000 inhabitants, the following numbers commit suicide in each class:

Country.	Protestants.	Catholics.	Other Christians.	Jews.
Prussia	159.9	49.6	130.8	46.1
Bavaria	135.4	49.1	......	105.9
Wurtemburg	113.5	77.9	......	65.6
Austria	79.5	51.3	54.0	20.7
Hungary	54.4	32.8	12.3	17.6
Transylvania	73.6	113.2	20.5	35.5

The only country in which suicide is more frequent among the Jews than the Catholics and Protestants, is Bavaria; and even here M. Legoyt says that in the Palatinate, where the Jews are more numerous, they number fewer suicides proportionally than among the Catholics.

Insanity.—M. Lévy says: "We associate with suicide, mental alienation; the example of the Israelites seems to contradict this idea, for with the minimum of suicides, statistics impute to them the maximum of *aliénés.*"

Criminality.—The Prussian judiciary statistics, as those of other countries, signal in the Israelites fewer infractions of the penal code than in the Christians:

		1857.	1858.	1861.
Inhabitants for 1 accused	Jews	172	138	150
	Christians	111	117	129

Infanticide and Abortion.—I have not met with any comparison of the relative frequency of infanticide and abortion among Jews, as compared with other religionists, but am persuaded that they are, as a race, freer from these iniquities than any other people. Protestant clergymen* and physicians† have shown that these crimes are much more frequent among Protestants than among Catholics in New England.

Illegitimacy.—They have fewer illegitimate children; the *Tabellen für* 1849 indicates the total number of births for one illegitimate birth:

Years.	Evangelists.	Catholics.	Jews.
1831	11.27	16.48	54.21
1834	10.97	16.05	54.68
1837	11.32	16.76	45.78
1840	11.57	16.73	47.61
1843	10.92	16.43	47.07
1846	10.87	16.09	43.83
1849	10.78	16.35	40.09
Average	11.10	16.40	47.59

Chastity.—The fact of the Catholic women having nearly three times as many illegitimate children as the Jewish, indicates that the Jewish *women* are three times as chaste, and more than four times as chaste as female "Evangelists." This fact by no means warrants us in attributing to Jewish *men* a chastity equal to that of their women, for I am convinced that Catholic men are very far below their sisters in chastity. It is universally conceded that Irish women (particularly Romanists) are, as a nation, more chaste than any other, while the Jews (women in particular) are more chaste than any other race. The writer would venture to suggest that the chastity of the Irish women is principally to be attributed to the almost universal influence of the Church of Rome, probably through the influence of sacramental "auricular" confession, while the traditional shame of illegitimacy among the Jews keeps up their standard of chastity.

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*Rev. John Todd. "Serpents in the Dove's Nest."

†Dr. Horatio R. Storer. "Is it I?" etc. Boston.

The influence of religions on chastity is very noticeable in Great Britain; the Catholics (Irish) being most chaste, the Anglicans (English) coming next, while the Protestants (Scotch) are least chaste of all. It is true that race here may have some influence, but I am fully persuaded that the prevailing religions are in some degree responsible for those differences in degrees of chastity. James Parton, the historian, says* of the Jews: "At the present hour they are probably the chastest seven millions of people under the sun."

Still-Births.—The same authority (Legoyt) says, they have fewer still-births, that is to say, infants who succumb, before, during, or a little after labor; the proportion is for them one in 39.5 births, while it is one in about 30 in the Christians (Hoffman, period 1823 to 1840). In 1849, M. Legoyt notes one still-birth among—

	Evangelists.	Catholics.	Jews.
Legitimate births	24.61	27.24	71.32
Illegitimate births	17.86	20.05	26.43

Glatter (loc. cit.) gives one still-birth in 19 among Christians, and one in 34 among Jews.

	Christians.	Jews.
Still-born in Prussia in 100,000 inhabitants	143	89
" " " among " children	3,569	2,524

Infant Mortality.—According to Lévy (p. 18), the Jews lose fewer children than other religionists: from 1859 to 1861, we find in

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*James Parton. *Our Israelitish Brethren.* Atlantic Monthly, Oct. 1870, pp. 358-403.

Prussia, for 100 births, the proportion of mortality which follows:

Evangelists.	Catholics.	Philipos.	Ger. Catholics.	Mennoni's.	Jews.
66.37	65.94	56.04	56.77	86.66	48.11

Our Israelitish Brethren, Atlantic Monthly, October, 1870, pages 358–403.

Causes of Longevity.—Besides physical causes of longevity already mentioned, there are others which may have some weight in this direction. Among these, the fact of Jews being obliged to keep two Sundays in a week, besides Jewish, Christian, and political holidays, or two out of every five days being lost to business, gives them by necessity about twice as many days of leisure as Christians. They do not engage in mining, mechanics, and other hazardous occupations. The biblical and traditional prohibition of certain aliments is favorable to longevity. The fifth and last of the summary of causes to which M. Legoyt attributes the greater mean average duration of life of this people, is "the *sentiment de la famille*, more developed in them than in Christians, assures to their children, to their aged and infirm parents, a solicitude more active; to the new-born, the mother's nursing; to the poor, an assistance more efficacious. Their charity is unequaled; their morality is demonstrated by judiciary statistics; the firmness and serenity of spirit are the most marked traits of their character, and proceed from a profound faith, from an unalterable confidence in Providence." They rarely use alcoholic liquors, and almost never to excess; this is universally conceded. They seldom marry out of their own race, and have little hereditary disease.

Parton, who quotes from the organ of the London Society for the Conversion of Jews, which spends $250,000 annually "in converting (?) a few poverty-stricken wretches, and sending abroad on highly interesting tours a few plausible renegades," confesses: "As to their moral qualities, the evidence seems to show that the lower class of Jews are decidedly superior to the same class among ourselves. They are far less given to drinking; their religious customs enforce a certain amount of cleanliness, both personal and in their dwellings; and two families are never found inhabiting the same apartment."

Among the conditions unfavorable to longevity, we may mention their almost universal habit of residence in large cities, and the rarity of their engagement in agricultural pursuits.

Dr. Glatter concludes from all this that, under the relation of duration of life, the Jews are in a condition much more advantageous than Christians. In effect, the more the mean duration of life augments in a people, as is the case with the Jews, the more it diminishes the number of widows and orphans; the more numerous the active and productive class, the more it diminishes the class of pure consumers.

It is evident from all we have here shown, that the numerical increase of a race depends more on the conservation of those already born than in a great fecundity with less conservation of the issue.

The Jews have always taken every precaution to preserve the life of every individual born.

The Mosaic laws prescribe most of these measures—even to the construction of their houses, requiring balustrades about the roofs to keep children from falling from them. Ancient Rome, with all the jealous care she exercised in the conservation of her citizens, did not approach the excellence of the Mosaic dispensation of these matters.

Jewish subjects would therefore appear to be much more advantageous risks for life companies than other races.—*New York Medical Record.*

NOTE.—It is quite remarkable that Haller, with all his sagacity, should not have mentioned the Jews, in his study of the longevity of different races and nationalities. Elementa Physiol. Corporis humani, t. viii, 2d edit. Lausannæ, 1778. L. xxx, sect. iii.

The author regrets not having been able to gain access to Prof. Stowe's lectures on Jewish Longevity, delivered at Hartford some years since.

Death from an Attempt at Criminal Abortion by the Introduction into the Abdominal Cavity of a Wire 17½ Inches in Length. By T. GAILLARD THOMAS, M. D., New York.—On the morning of December 20, 1872, I was called to see Mrs. X., æt. thirty-two years, native of the United States, wife of a physician, and mother of two children. She stated that during her pregnancies she had suffered so much discomfort that she had determined to bear no more children. Her last menstrual period was now overdue ten days, and as she felt sure that she must be pregnant, she had proceeded to produce an abortion upon herself just fifteen hours before my visit, which was made at 10 A. M. On the previous evening she procured a piece of steel or iron wire as long and as large as an ordinary knitting-needle. At 7 P. M. she had laid herself upon her bed, and passing this wire up the vagina, pushed it, as she thought, very gently into the uterine canal. It passed up with very little effort and created little pain and hemorrhage. As she found it advance she had gone on pushing slowly until the end of the wire was on a level with the vulva. Then she put her finger against it and carried it as far up the vagina as she could. Suddenly it slipped up and disappeared. This alarmed her considerably, for it had been her intention to have withdrawn the wire after its insertion for a sufficient distance to accomplish her purpose. I questioned the patient and her husband very closely, and this story was reiterated in every particular and apparently in such good faith that, although I had not believed a word of it in the beginning, I gave my full credence to it in the end.

I now requested the patient to leave her room, and had the bed, the room, and furniture carefully examined, in the hope that the wire might have slipped out, but it could not be found, and placing her again in bed, I proceeded to make a physical examination.

The temperature was 98½°, and the pulse 120 to the minute, but this acceleration appeared due to nervous excitement rather than to any pathological development. Examination by vaginal touch revealed a uterus of normal size and presenting none of the signs of pregnancy. The os externum was rather smaller than normal, so that the introduction of a sound into it would have been a matter of some difficulty. In the vaginal wall on the left of the uterus and about half an inch from the utero-vaginal junction, there was an opening into which the tip of the index finger could be passed. Nothing was felt in it, but the introduction of the finger caused a slight flow of blood to occur. The patient was now placed upon the side upon a table before a window, and Sims' speculum introduced. The vagina having been freed from blood, the opening could be clearly seen, and through it I passed Simpson's sound for two or three inches into the peritoneal cavity, and turned it gently around in the hope of striking the wire. This hope proved delusive, and, as the dilatation of the canal by the sound produced free hemorrhage, I desisted and placed the patient again in bed.

I had noticed, in removing her from the bed to the table, that, whenever she was placed in the sitting posture, she complained of severe, stitching pain in the right side posteriorly just opposite the liver. I now got her to assume this position, and whenever she did so this pain was created to such an extent that she would scream out in great agony and demand her replacement upon the back. There was no cough or difficulty in respiration, and auscultation demonstrated nothing abnormal.

On the next day I saw the patient and found that she had suffered so much during the night that she had been forced to take freely a preparation of morphia which I had left her. She described her suffering as having been paroxysmal, and stated that it had occurred in consequence of her assuming the sitting posture. To test this matter more thoroughly, I persuaded her to sit up when I was present, and instantly a severe pain seized her over the base of the right lung, which lasted for eight or ten minutes.

I examined the lung, and detected a distant friction sound upon full inspiration, while percussion revealed a certain amount of dullness which I attributed to the commencing effusion of fluid. The temperature was now 101½° and the pulse 120.

The patient now complained of considerable pain in the nape of the neck, so that I feared that tetanus was about to develop itself, but this symptom gradually diminished, while that of pain over the base of the right lung steadily increased.

On the evening of the second day, the patient appeared so ill, that early on the morning of the third day I got Drs. James L. Brown, Ward, and Walker, to meet me at her house, and carried all the instruments necessary for the operation of gastrotomy. At this consultation it was decided that the operation was not warrantable for three reasons: the patient had improved since my last visit; even if a wire no longer than a knitting-needle had been passed into the peritoneal cavity, it was very possible that it would remain there without serious damage after the system of the patient became accustomed to its presence; and lastly, the patient and her husband, brought face to face with a grave surgical procedure, both swerved from their former statement and expressed doubt as to whether the wire had really penetrated the abdominal cavity, or merely punctured the vaginal wall and then been lost in the bedclothes. Some of her friends too were opposed to the operation, and urged upon me that in view of her condition at that time it should be delayed at least until more untoward symptoms developed themselves.

At this time I left New York for Troy, to be absent for ten days. The patient was left in the charge of Dr. Charles S. Ward, with the injunction that if he deemed gastrotomy at any time advisable he should immediately resort to it. On the very day of my departure a violent attack of pneumonia added itself to the pleurisy already existing, and rapidly spread over the whole of the right lung. This progressed with only one remarkable development, which showed itself on the 29th of December. Upon the patient's sitting up to cough, a violent effort caused the expulsion by the mouth of a large teacupful of bloody pus. This material she continued to expectorate from that time to the close of her life. On the 4th of January I saw her, with Dr. Ward, and predicted her death within twenty-four hours, at about the end of which time it occurred. Upon this visit I found the right lung entirely solidified, the patient constantly expectorating a dark, bloody pus, and the general symptoms all showing that dissolution was rapidly approaching.

On the morning of the 6th of January, about twelve hours after death, an autopsy was made by Dr. Ward in the presence of Dr. Tucker and myself. The appearance was so greatly altered that recognition was difficult. The face and trunk were very much swollen and the lips discolored, although so short time had intervened since death, and the weather was very cold.

The peritoneal cavity being exposed by a long incision, no traces of peritonitis were found to exist in any part. Upon passing the finger deeply down toward the sacro-iliac synchondrosis of the left side, the extremity of a large wire was felt about two inches above the vaginal roof. Following the course of this with the finger, it was found to run deep down below the intestines just over the large vessels on the spine, across the abdomen to the liver; striking the right lobe of this organ upon its lower face without injuring it, it had glanced backward, to the diaphragm; had penetrated this, and, plunging into the lung, entered its tissue for the distance of two inches. The wire, being seized by its lower extremity and drawn out, was found to measure seventeen and a half inches. It was, apparently, one of the longitudinal wires employed in the manufacture of umbrellas. The right lung was found to be in the third stage of pneumonia, and an abscess had formed in its lowest portion where the wire had penetrated.

This singular case presents several points worthy of consideration. It is surprising that a woman could inflict such serious lesions upon herself with so little pain, and that the lung itself could have been penetrated without the occurrence of hæmoptysis.

It is equally surprising that after the infliction of the injury so little constitutional disturbance was excited for so great a length of time as that which intervened between its occurrence and the development of pleurisy. Lastly, it is almost incredible, that one who had practiced medicine, was not entirely ignorant of anatomy, and had never developed palpable signs of absolute imbecility, should have stood by while a wife, to whom I have every reason to believe he was sincerely attached, committed so suicidal an act.

But there is a much more important stand-point from which this subject must be viewed, and one from which, in the present state of abdominal surgery, the examiner may well ask for full and explicit answers to the question: "Why was this wire not removed by gastrotomy?"

We are all wise after the elucidation of a fact, and, related as this case here is, it will appear to many that it must have been from its commencement a clear one. In reality, for me, it was, I think, the most perplexing that I ever met with at the bed-side. Let me state *seriatim* the reasons which led to the adoption of the course which was pursued.

1. I was in great doubt as to the truth of the story which was related to me. Criminal abortion is so shockingly common in New York that every practitioner familiar with its prevalence and the unscrupulousness of the miscreants who practice it, is constantly on his guard against being made a shield for the escape of the guilty party. For some time I construed the story which was told me in this way: The parties, I thought, were not husband and wife, but an abortionist and his victim on a visit to a large city to escape the espionage of a smaller community. He had punctured the peritoneum and possibly a loop of intestine, and was anxious to mislead me into the performance of a dangerous operation that would possibly result in death, which was rendered inevitable by his own action. I gave up this view in time and believed in the story as I have related it, but out of four physicians who examined the case, I think that I am correct in saying that I stood alone in my credulity.

2. It was exceedingly doubtful whether the wire which had punctured the roof of the vagina was really in the peritoneal cavity or not. Although this was positively asserted by the patient and her husband at first, when brought to the crucial test of gastrotomy they became vacillating, weak, and uncertain in their statements. Dr. Ward yielded his belief in the presence of

the wire only when it was found by him in the autopsy. It may be asked whether pain at the base of the right lung, increased by assumption of the sitting posture, did not point to its presence? I would answer, No; because a wire only as long as a knitting needle could not possibly extend from the vagina to the lung of the opposite side, and because coincident pleurisy would have explained the symptom.

3. Even if a wire as small and no longer than a knitting-needle were deposited in the cavity of the peritoneum, it was a doubtful question, so long as no grave symptoms developed themselves, whether it would have been wiser and safer to leave it or to resort to gastrotomy for its removal. This remark does not refer to the wire (17½ inches in length) which was found, but to one the size of a knitting-needle, which the patient and her husband constantly declared to have been that which was employed.

4. Had I for a moment even suspected that so long a wire had been inserted, I would have connected the pain over the lung with puncture of that organ by the foreign substance, and this would have been a corroborative evidence of its presence. Unfortunately the patient and her husband to the end persistently falsified with reference to this point, probably from shame in acknowledging their extreme ignorance, and by so doing led me further from the truth than they did in any other way.

5. The time for deciding the question of gastrotomy virtually passed away in three days. At the end of this time severe and wide-spread pneumonia not only made the propriety of a grave operation questionable, but masked the symptoms which would otherwise have developed in connection with the presence of the wire.—*American Journal of Medical Sciences.*

Instinct.—A capital paper on Instinct, written by Mr. Douglas Spalding, and containing what is so much needed for the elucidation of the subject—a record of original experiments—is to be found in the February number of *Macmillan's Magazine.* Mr. Spalding adopts, though with evident hesitation, Mr. Herbert Spencer's doctrine of inherited acquisition to explain the remarkable phenomena of instinct. At any rate, he thinks that the nervous and muscular systems of new-born animals are so co-ordinated by inheritance as to respond at once to impressions and to perform acts not previously learned by experience. Instinct, he says, is the product of the accumulated experiences of past generations. He is therefore opposed to Professor Bain's view, that young animals possessing great spontaneity and a strong power of association learn to make certain movements; or, in other words, that their acts are, in reality, the result of education. In order to show that this explanation is not admissible, Mr. Spalding took eggs just when the chicks had begun to chip their way out, and removing a piece of the shell, drew over their heads, before they had opened their eyes, little hoods, which, being furnished with an elastic thread at the lower end, fitted close round their necks. In the course of a day or two they were unhooded on the center of a table covered with a sheet of white paper, on which a few small insects, dead and alive, had been placed. For some minutes they appeared bewildered, but almost immediately furnished conclusive evidence against the theory that the perceptions of distance and direction *by the eye* are the result of experience. Often, at the end of two minutes, they followed with their eyes the movements of crawling insects; and in from two to fifteen minutes, would peck with almost infallible accuracy at very minute objects. In the same way, it was shown that the space perceptions of the ear were not acquired but ready for instantaneous use. Thus Mr. Spalding stopped the ears of several with gummed paper, which rendered them so deaf that they remained perfectly inattentive to the voice of the mother when separated by only an inch board. These had their eyes opened when between two and three days old, and on being placed within call of the mother, hidden in a box, they, after turning round a few times, ran straight to the spot whence came what must have been very nearly, if not actually, the first sound they had ever heard. In another case Mr. Spalding made a very instructive experiment, which we must permit him to tell in his own words: "A young turkey which I had adopted when chirping within the uncracked shell was, on the morning of the tenth day of its life, eating a comfortable breakfast from my hand, when a young hawk in a cupboard just beside us gave a shrill 'Chip-chip-chip.' Like an arrow the poor turkey shot to the other side of the room, and stood there motionless and dumb with fear, when the hawk gave a second cry, when it darted out at the open door to the extreme end of the passage, and there, silent and crouched in a corner, remained for ten minutes." Mr. Spalding gives other indications of instinct which prove that the operations included under this term are not acquired by experience; and other acts, again, which prove that the very young animals are but little able to profit by the experience of others, or to practice habits foreign, if we may so speak, to the mechanism of their own organization. This last point is particularly clearly brought out in the case of chickens brought up with turkeys, the former never learning the very superior mode of catching flies of the latter. We fully agree with Mr. Spalding in thinking that the doctrine of inherited acquisition is the best working hypothesis as yet advanced, though there are doubtless some points which it fails to explain.

Additional proof that special tastes or instincts are inherited after they have been acquired by their parents, is afforded by the communication which appeared recently in *Nature*. In this Mr. Huggins states that he possesses an English mastiff of pure breed, which, when six weeks old, was brought from the stable in which he was born. The first time Mr. Huggins took him out, he started back in alarm at the first butcher's shop he had ever seen, and it was soon found that he had a violent antipathy to butchers and butchers' shops. Inquiries instituted by Mr. Huggins showed that this antipathy existed, not only in the dog's father, Turk, but in his grandfather, King, as well as in other relations of his own generation. Mr. Darwin, in a note accompanying this letter, observes that most inherited feelings of this nature were probably originally acquired by slow degrees through habit and the experience of their utility, but that many of the most wonderful instincts have been acquired independently of habit through the preservation of useful variations of pre-existing instincts; while others, again, as the tumbling of the tumbler pigeon, may have arisen suddenly in an individual, and have been transmitted independently both of selection and of serviceable experience, though subsequently strengthened by habit. Perhaps the singular fear that some monkeys (as related by Pearce and by Livingstone) and some birds exhibit of a gun, is an instance of inherited antipathy.—*London Lancet.*

Ovariotomy.—J. Marion Sims, M. D., of New York, in a recent number of the *New York Medical Journal*, has an extended paper, in which he claims that the majority of the fatal cases of ovariotomy are caused by septicæmia. To substantiate his opinion, he presents the records of thirty-nine fatal cases taken from the first 115 operations made by Mr. Spencer Wells; of these, the latter gentleman interpreted the causes of death as follows: Intestinal obstruction, 1; tetanus, 2; pyæmia, 2; heart-clot, 3; exhaustion, 7; peritonitis, 12; septicæmia, 7; not stated, 5. Total, 39. Dr.

Sims makes the causes: Tetanus, 2; pyæmia, 3; septicæmia, 34. Whenever, in the progress of a case, after operation, there was a discharge of reddish serum beside the pedicle, he put it down as septicæmia. In every one of the author's seven post-mortem examinations, and in every one of Mr. Wells' twenty-six, there was a quantity of reddish serum, or grayish turbid serum, or fetid serum, or putrid serum, or acrimonious serum, in the peritoneal cavity; and in cases slowly dying of pyæmia, pyogenic reservoirs are found in the pelvic cavity. He thinks it is logical to infer that these pent-up fluids are the causes of the blood-poisoning that so uniformly and universally attends the fatal cases of ovariotomy. Dr. Sims gives Dr. Peaslee credit for the principle of intra-peritoneal medication which was originated by the latter, and only claims to be his coadjutor. But the rule that he would establish for exceptional cases, Dr. Sims would wish to make applicable to all alike; and instead of washing out the peritoneal cavity at the top, he proposes to open it at the bottom, as he did in 1855, and let the fluids run out spontaneously and continuously. The natural outlet of the peritoneal cavity is through the Douglas *cul-de-sac.*

Dr. T. Parvin, of Indianapolis, Indiana (*American Practitioner*, November, 1872), in reviewing three cases of ovariotomy, is impressed with the value of a preliminary tapping in cases of ovarian dropsy when the tumor is large. The tumor, by its immense size, has seriously disturbed vital functions. Lessen its size, so that that interference may be temporarily at an end, and the patient may rally and recruit her forces. And again, it is less violence to remove a mass of ten or twenty pounds than one of forty, fifty, or sixty. Possibly or probably the patient's chances of recovery are increased in proportion as the size of the tumor is diminished. Finally, for the purpose of diagnosis, a preliminary tapping is of great value. As to the method of securing the pedicle, he believes, when the length is sufficient, there is nothing so simple, so easy, and so efficient as the clamp.

Novel Case of Sneezing.—In a letter from Dr. Y. A. Winn, of Libertyville, Mo., he says: "I will mention a very singular case—singular to me at least. A gentleman informs me that when prompted to sexual commerce, he is seized, immediately prior to the act, with a fit of violent sneezing—not unfrequently even the *thought* of coition produces this effect. Query: How would you prescribe in such a case? May the sneezing be excited by some pathological condition of the nervous system, in which the excitation of the Schneiderian membrane is due to some complicated reflex nervous action? The gentleman being married, we are at a loss for a satisfactory remedy. Fortunately, his wife has never *apparently* noticed this peculiarity. If she should, and he did much sneezing in the presence of other ladies, even *sneezing* might be a sufficient ground for divorce."

The *London Medical Record* is responsible for the following on sneezing:

"The custom of invoking a blessing upon persons who sneeze is, says Dr. Seguin, in a recent article on sneezing, a most interesting one. Several old medical authors state that the custom dates back from the time of a severe epidemic (in which sneezing was a bad sign) during the pontificate of Gregory the Great. Brand, however, and the author of an article in *Rees' Cyclopædia*, state that the phrase 'God bless you,' as addressed to persons having sneezed, is much more ancient, being old in the days of Aristotle. The Greeks appear to have traced it back to the mythical days of Prometheus, who is reported to have blessed his man of clay when he sneezed. In Brand the rabbinical account is given, that the phrase originated in the alleged fact that it was only through Jacob's struggle with the angel that sneezing ceased to be an act fatal to man. In many countries sneezing has been the subject of congratulations and of hopeful augury. In Mesopotamia and some African towns, the populace is reported to have shouted when the monarchs sneezed. Sometimes, moreover, it is very important not to sneeze; and Dr. Seguin has discovered what has been discovered before, but is insufficiently known—that sneezing may be prevented by forcibly rubbing the skin below and on either side of the nose. And on this observation of himself, and of Marshall Hall, Diday, and the world generally before them, he bases an exceedingly interesting study of the physiology of sneezing in health and disease."

Dr. Josiah C. Nott.—This distinguished surgeon died at Mobile, March 31st, on the morning of his seventieth birthday. Dr. Nott was born at Columbia, S. C. He graduated in medicine at the University of Pennsylvania; demonstrated anatomy for several years in connection with the Philadelphia almshouse; visited Europe; and returning settled in Mobile in 1833. Here he at once acquired an extensive practice, and made himself felt in the profession of the entire country as a bold, original thinker and a vigorous writer. In 1856 he occupied for a short time the chair of anatomy in the University of Louisiana. Two years later he established the Medical College of Alabama in Mobile, his own name securing to it from the start a place among the best institutions in the country, and his teachings in surgery lending it a peculiar attraction to students throughout all the southern states.

With the fall of Fort Sumter in 1861 he took service in the army of the Confederacy, and filled with distinction the highest positions in its medical department. At the close of the war he was driven by impaired health to leave the beautiful city where he had spent so many years of his life and seek a more northern climate. He went to Baltimore, where his good name had long preceded him, and immediately took a commanding position in his profession. A year after he was persuaded to remove to New York, since which time he has been recognized as one of the leading gynecologists in that great city.

Dr. Nott was no common man. As a surgeon he was original, bold, collected, dexterous; as a lecturer, fluent, earnest, striking; as a writer, scholarly and forcible; as a man, independent, dignified, kindly, genial; and as a friend, steadfast, sympathetic, and true. His death will be deplored as a public calamity.

Epitaphs.—Good Lord! Our sterling contemporary, the Edinburg *Medical Journal*, occasionally admits a bit of pleasantry, as witness the following from one of its correspondents:

EPITAPH ON SIR FIELDING OULD, M. D.

An eminent Midwifery Practitioner in Dublin in the last century.

Sir Fielding Ould was made a Knight.
He should have been a Lord by right;
For then each lady's prayer would be,
"O Lord! good Lord! deliver me."

EPITAPH ON PAT M'CARTY.

Beneath this stone lies Pat McCarty,
In humble hope to rise in glory.
His doctor's name was Moriarty,
Who soon obliged him *ante mori*.

Editorial.

Cephalic Version.—In 1854, Dr. M. B. Wright wrote an essay on the treatment of shoulder presentations by cephalic version, which was published in the Transactions of the Ohio State Medical Society. Since that time, successful cases have been published in the periodicals of the day, giving to Dr. Wright's method an undoubted established value.

The young critic, who cherishes the idea that "all practical thoughts emanate from the German school," may not be disposed to give credit to Dr. Wright for having originated the "bimanual method" of performing cephalic version. But the solid men of the profession, whose opinions are deemed authority, have used more affirmative language.

Dr. Miller, in the second edition of his works on obstetrics, published in 1858, has given an extended criticism on Dr. Wright's essay, from which are taken the following extracts:

"Since the appearance of the first edition of this work, Prof. M. B. Wright, of Cincinnati, has published a reclamation of cephalic version, entitled, "Difficult Labors and their Treatment;" for which a gold medal was awarded by the Ohio State Medical Society. The high reputation of the author, both as a practitioner and teacher, together with the indorsement of the State Medical Society to which he belongs, entitles his essay to a candid and respectful consideration.

"I have quoted Dr. Wright's description of the operative maneuver in cephalic version, because it is the best and most precise one which I have anywhere seen. On comparing it with the loose directions of M. Caseaux, it will appear to the greater advantage, and justify, I think, the claim of Dr. Wright, if not to originality, at least to the credit of having more clearly apprehended the object to be attained, and of more perspicuously pointing to the proper method of attaining it."

Dr. Condie in his American edition of "Churchill's System of Midwifery," says, "There can not, we think, be any doubt as to the possibility, in certain cases of arm or shoulder presentation—when the head of the fetus is small, and the pelvis large—of cephalic version, particularly in the manner practiced by Dr. Wright, being effected."

Prof. Bedford, in brief yet explicit language admits, that "Dr. Wright, of Cincinnati, in a paper on cephalic version, suggests the following operation."

Prof. Hodge, always candid and just, observes: "Dr. M. B. Wright, of Cincinnati, recommends another mode of operating, which certainly is very simple; safe to the mother and child; and, according to Dr. Wright, very successful.

"It is certainly a very ingenious and scientific suggestion, very creditable to the author, and deserving the serious attention of every accoucheur."

We have been induced to write this article by reading a letter, published in the February number of the *American Journal of Obstetrics*, and signed "J. Braxton Hicks;" and also a rejoinder in the May number of the same journal, signed "M. B. Wright."

The claims and opinions of a man, whose articles are headed, "Physician-Accoucheur, and Lecturer on Midwifery and Diseases of Women, at Guy's Hospital, London, President of the Obstetrical Society of London," are justly entitled to consideration—to refutation or approval. On this ground we proceed to our task.

In his letter, Dr. Hicks endeavors to deprive Dr. Wright of the credit of having originated the bimanual method of performing, cephalic version in shoulder presentations, and to establish it for himself. Dr. Wright, in his letter of reply, has shown very conclusively that his mode of proceeding originated with himself. Read what Dr. Hicks says:

"On reading over Dr. Wright's original paper, I was not surprised to find that between Dr. Wright's and my plan of turning, there was just the difference that obtained between the old cephalic version plan and that which I had suggested; and it is evident by comparing typical cases of each, which I insert below, that Dr. Wright only used the internal hand, not even mentioning the use of the *external one*. Now, the distinctive point of the plan I have introduced was just this, that *both hands are used* together, one supplementing the other, so that when the internal hand would begin to gain power, and *vice versa*.

"This principle was applied by me to both partial and complete version; and it is (as far as I have been able to discover) a curious fact, that in the practice of neither the German nor other obstetricians, has the use of the two hands simultaneously been described. The only use of the outside hand has been hitherto to steady the uterus to prevent recession. This character it is which Dr. Richardson* has overlooked, and it is for that I am desirous of claiming for myself whatever of originality it possesses. I may add that, before my description no author had described complete podalic version, without passing the hand internally, with both hands, in such a manner that we might choose which pole of the fetus should cause to present. Wigand, in transverse presentations, was only able to bring down that pole which was nearest the os uteri. My plan permits us to elect.

"These remarks I make not to the disparagement of Dr. Wright's plan—on the contrary, I consider it excellent as far as it goes; and the principle of pushing the child along the curve of the inner wall of the uterus is well grounded."

It will be noted that the leading claim of Dr. Hicks consists in the performance of cephalic version, in shoulder presentation, by the use of *both hands;* while he avers Dr. Wright uses only *one hand.*

To show the great error of the statement of Dr. Hicks and the fallacy of his argument, Dr. Wright has quoted the following from his original essay:

"Suppose the patient to have been placed on her back, across the bed, and with the hips near its edge—the presentation to the right shoulder, with the head in the left iliac fossa; the right hand to have been introduced into the vagina, and the arm, if prolapsed, to have been placed as near as may be in its original position, across the breast. The fingers are now to be applied to the top of the shoulder, and the thumb in the axilla, or such part as will give greatest command of the chest, and enable us to apply a degree of lateral force. *The left hand is also to be applied to the abdomen of the patient over the breech of the fetus.* Lateral pressure is to be made *upon the shoulders* in such a way as to give to the body of the fetus a curvilinear movement. At the same time the left hand, applied as above, makes pressure so as to discharge the breech, as it were, and move it toward the center of the uterine cavity. The body is thus made to assume the original bent position; the points of contact with the uterus are loosened and perhaps diminished, and the force of adhesion, in a good degree, overcome. Without any direct action on the head, it gradually approaches the superior strait, falls into the opening, and will, in all probability, adjust itself as a favorable vertex presentation. If not, the head may be acted upon as in deviated positions of the vertex; or it may be grasped, brought into the strait, and placed in correspondence with one of the oblique diameters."

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* Dr. W. S. Richardson, Boston.

All who may have read this will concur in the opinion that Dr. Hicks greatly misrepresented Dr. Wright when he said "that Dr. Wright only used the internal hand, not even mentioning the use of the *external one.*" And he has utterly failed to make good his own claim.

The next question is, Are the manipulations of the gentlemen alike with either the external or internal hand, or as to the mode of acting on the fetus? No: they are essentially different. Dr. Hicks acts upon the head exclusively and by the external hand, while Dr. Wright acts upon the breech. With his two internal fingers Dr. Hicks performs simply touch; with his entire hand Dr. Wright pushes the shoulder aside.

The force applied is in opposite directions. Dr. Hicks makes pressure *downward*, Dr. Wright upward.

The publication of successful cases by "Wright's Method" commenced as early as 1850, while the announcement of Dr. Hicks' plan was not made until ten years subsequently. We think, therefore, that Dr. Hicks must abandon his claim in every particular.

The Ohio State Medical Society.—The proceedings of the meeting at Columbus were a success. Our readers will find the report elsewhere in this number. The attendance was full, and the Columbus doctors did their utmost to make the members feel at home. The reports were full and abundant. The members of the Toledo Medical Association were on hand in force, and hence we could not resist their seductions. We agreed, *nem. con.*, to meet in that city on the first Tuesday of June, 1874. The city of Cleveland was very properly complimented with the next presidency, Prof. H. J. Herrick being the honored man.

A Homeopathic Dose.—We were recently called to attend a patient from whom a homeopath had just been discharged. The last prescription was exhibited, not having been filled because the druggist was afraid:

℞. Iodid. potash, ʒiv.
Wine of colch. ℥i.
Cinnamon water, ℥i.
M. S. Take a dessert spoonful three times a day. (!)

A Case in Obstetrics.—Ohio has a law requiring all practitioners of medicine to be graduates of some recognized medical college. An effort was made to secure a similar law in our adjoining State of Indiana, but the sentiment in that State is rather to the effect that *practical* medicine is ahead of science. A friend from Indianapolis tells a story in illustration of the truth of this statement that will bear repeating, though we can not hope for the inimitable manner of our friend. A very clever accoucheur was called to attend a case of labor. He found the case all right, but labor pains progressing slowly. At length the family became out of patience, and asked that a prominent "steam doctor" be sent for in consultation. Of course, this was pronounced out of the question, but if any additional advice was desired, a certain well-known teacher of obstetrics would be acceptable. This was agreed to, and in a little while the venerable professor was at the bedside, only to confirm the views of the attendant, that everything was correct, and time and patience would in due time bring everything out right. But still time passed, and the labor was not completed; and again the friends became clamorous for "Mr. Steamer." This time our "regular" friends, par excellence, thought it a good time to show the contrast of science and pretense, and so decided to await the appearance of Mr. Steamer. He came, all bows and courtesy.

Regulars. Sir, this case is tedious; we have waited for the efforts of nature; pains being sluggish, we have given ergot, also quinine; and as yet the case seems to progress very slowly.

Steamer. (Replies in a solemn way, evidently appreciating the full value of all the therapeutics that our friends have dispensed.) Yes—yes; ergot—yes; quinine—yes (evidently understands the value of these remedies); but with all these you have made no progress in the completion of labor?

Regulars. The case, as you see, is evidently a tedious affair.

Steamer. Have you *quilled* the lady?

[Now was the time for science to be up to par; but science evidently was at fault, and our regulars made a poor show of understanding the technicalities of *practical* obstetrics.]

Regulars. Well, no: we have n't tried *quilling.*

Steamer. I think you 'd better try it.

[By this time the christian patience of regulars was exhausted; and the original attendant simply says: " *Quill* her yourself, and be d——d!"]

Mr. Steamer quietly took out his toothpick, filled it with snuff, and slipped it in the nostrils of the patient, and in a few seconds she sneezed violently again and again. This provoked violent explosive and expulsive efforts downward, and in a very few minutes *the baby was born!* Hence, you see clearly, a few grains of good, common, practical sense is worth a pound of impracticable science; so too, hence, the *practical* people of Indiana do n't want any restrictive laws that will delay—labor.

Attention is called to the announcement of the "Detroit Medical College" in our advertising columns. This is one of the oldest medical colleges in the West, and one of the best.

Literary Notes:

Work: A Story of Experience. By LOUISA M. ALCOTT. Boston: Roberts Brothers, 1873. Price $1.75. Robert Clarke & Co.

We are obliged to the publishers for a copy of the above very readable domestic story. It relates the very miscellaneous life-experience of a young girl who was determined to be an independent worker. Like all Miss Alcott's books, this is pleasant to read, and healthy in its influence.

We also have regularly at hand the following magazines, too well known to require special endorsement from us:

Scribner's Monthly. An illustrated magazine of the highest character, conducted by Dr. J. G. HOLLAND. Address Scribner & Co., 654 Broadway, N. Y. Price, $4.00; or, with the LANCET AND OBSERVER, for $3.00.

Godey's Lady's Book. Philadelphia: $3.00 a year, or $2.50 with us. July begins the 87th volume!—a good time to begin.

From J. R. Osgood & Co., Boston, we have the *Atlantic Monthly* and *Our Young Folks.* Each of these is standard in its line. Mature readers and the youngsters are each supplied with full diet.

From the Methodist Book Concern we receive the old and well-known *Repository*—never better than since it came into the hands of Dr. Wentworth—and the *Golden Hours*, intended to occupy the same field as the *Young Folks*.

Cincinnati Industrial Exposition.—We have received the report of the Commissioners of the Grand Exposition of 1872, showing the full working of all the departments. We have also before us the rules and premium list for 1873. There can be no doubt of the attractions which will be presented, and the immense crowd of people who will visit the city at that time. The exposition opens September 3d, and lasts one month.

The Miami Medical College.—It will be seen by the regular card that several changes have taken place in this institution. Prof. Norton has resigned the chair of chemistry, to accept the same place at the Agricultural College at Columbus. Dr. J. B. Hough is elected to fill his place. We think the friends of the College have every reason to be gratified with this selection. Prof. Taylor is permanently transferred to the chair of obstetrics, in association with Prof. Mendenhall. Dr. J. C. Mackenzie is elected to the chair of physiology, made vacant by the transfer of Prof. Taylor.

Bills.—According to our usual custom we forward bills to all in arrears; and as we have special obligations to meet during July, we trust *every one of our friends* receiving their little reminder will immediately forward the amount. We will cheerfully correct all mistakes, and trust, if any, our subscribers will at once advise us, that we may correct our books.

[Recently some strictures appeared in the *Clinic*, of this city, in regard to the appointment of physicians to the out-door poor. The communication had the well-known initials, "J. L. C." A reply appeared, signed "A. B. J." Dr. J. thinks much of the force of his rejoinder was lost by the omission of certain parts, and therefore asks space for the following. We trust our friends will not lose sight of the extremely hot weather now upon us: —ED.]

Editor Lancet and Observer: The O. D. P. Physician's Reply to "J. L. C." "Some strictly personal allusions," which were "omitted" from the Cincinnati *Clinic* for June 21, 1873.

Your correspondent, "J. L. C.," is, under ordinary circumstances, a very amiable young man, as we can testify. He makes the way to the favor of the Board of Health so plain that it is evident he is an old traveler therein; and, having failed after years of effort to secure an appointment, it is no wonder he has lost his temper, and dances around the board with his little tomahawk, threatening to raise the hair of the district physicians.

His charge of favoritism against the members of the Board of Health is a gross libel. Occasional instances of personal preferment undoubtedly may be found. It is not to be supposed that contemplation of disinfectants has purified the natures of the gentlemen composing the Health Board, above ordinary mortals. But, for the most part, the members have no acquaintance with, or knowledge of applicants for O. D. P. positions, beyond what they acquire through the prominent physicians of the city. A list of the district physicians for the last five years contains the names of nearly all the younger physicians of the city. We can call to mind only a few exceptions, one being Dr. J. L. C. Where favors are distributed so widely, the cry of favoritism is simply absurd.

The next point J. C. L. touches upon is "incompetency." The appointments are all made from graduates of regular medical colleges—the majority from our home institutions, which, for pretentions at least, are "equaled by few and surpassed by none." If the O. D. P. physicians are the illiterates J. L. C. represents, how do they pass examinations pronounced by Dr. W. W. Dawson to be as thorough as any required by English medical examining boards, which are accepted the world over as sufficiently rigid? Does J. C. L. affirm that our colleges are mere nurseries of quacks and incompetents? If so, then as an instructor in a manufactory of medical imbeciles he can claim no precedence in "professional honor, merit, and scientific attainments" over even a district physician. A. B. J.

Dr. E. B. Stephens: In my letter to you, written in Philadelphia (page 376), I neglected inserting the words "post parturiente" after "congestive menorrhagia." It should read, "Congestive menorrhagia post parturiente."

Reviews and Notices.

On the Functional Diseases of the Renal, Urinary, and Reproductive Organs: With a General Review of Urinary Pathology. By D. CAMPBELL BLACK, M. D., L. R. C. S., Edinburgh. Philadelphia: Lindsay & Blackiston, 1872.

The title of the book before us quite sufficiently indicates its character and scope. Some of the chapters are almost exhaustive of their topics. Thus the chapter on spermatorrhœa—the whole philosophy and therapeutics of this vexatious condition is treated with unusual clearness. The author has brought into requisition cases, anecdotes, and a pleasing style, so that he affords for us a very interesting and readable book.

For sale by Robert Clarke & Co. Price, $2.50.

The Passions in their Relations to Health and Diseases. Translated from the French of X. BOURGEOIS. By H. F. DAMON, A. M., M.D. Boston: James Campbell, 1873.

If we quote a few of the opening paragraphs of this little book, I am sure we will agree that it is what is known as a "sensational book," not so much intended for medical or scientific instruction as for popular amusement. The book opens with a chapter on *love.* And so we are treated with "manifestations of love; the source of all passions; sensual love; moral and platonic; gallantry; coquetry; social influences on love; puberty; symptoms of love," and so on, for quantity. It is barely possible that such material may be of use in the culture of people, but we doubt. It would be difficult to construct a book of this size and upon this plan, with no useful matter included, but we must say that as an entire volume it is simply sensational, and intended for the itching inquirer.

For sale by Robert Clarke & Co. Price, $1.25.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

VOL. XVI.—AUGUST, 1873—No. 8.

Original Communications.

Art. I.—The Matter of the First Phases of Life, and the Action of so-called Remedies in Living Bodies.

By Z. COLLINS McELROY, M. D., Zanesville, Ohio.

A late number* of this journal contains two articles which could hardly find a place in medical periodical literature, except in the pages of the catholic LANCET AND OBSERVER.

The demand, alike of conductors and patrons, is for "practical" matter; matter such as appears in patent medicine almanacs, showing the "practical" effects of this or that drug or medicine in this or that so-called "disease."

These "clinical" reports have their uses and places in medical literature, and in the future "science and practice of medicine." Besides, "clinical experiences" are the final or "supreme" court, in which all "drugs and medicines" must make their appearance, and receive trial and judgment, which, in the main, will be final and conclusive as to their uses and value.

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*July, 1873.

But "empirical" experiences do not constitute a science of life and therapeutics. At best, the "experimenter" is but one of the audience, observing the drama of life as it can be seen and studied in front of the foot-lights. The "all of life" can not be thus observed. It must be studied behind the foot-lights and screens as well. The material of living bodies, the forces (or force) which give motion to these materials, the mode by which organic forms of structure are educted from chemically complex matter, the conditions for the performance of a function, and the mode of reproduction and perpetuation in gross of special forms of life, can best be studied thus.

Prof. Hough states what he has observed, and gives a summary of results, all of which are interesting. He has seen, or thinks he has observed, "chlorophyl" change its chemical condition and become "protoplasm"—the formless material basis of all life, animal or vegetable. This again into "monads"—the simplest kind of minute animalculæ. Chlorophyl into "amœba" animalculæ, like flowers, capable of undergoing many changes of form at will (apparently); therefore into "protococcus," and there again into "dermids," etc.

Now, to study these phenomena behind the screens, it is necessary to inquire first, what is "chlorophyl?" The answer is, "the green coloring matter of the leaves and other parts of plants, consisting of minute grains lying loosely in the cells of the tissues," according to Webster, quoting "Gray" as authority.

In fact, chlorophyl has apparently been regarded only as coloring matter, and has not been much studied. I do not find any formula of ultimate analysis at hand. Hare, twenty odd years since, stated it had not been obtained sufficiently sure to have any formula assigned to it, and that it does not contain nitrogen. "That it floats in cells, existing in the green leaves of plants in general, in the form of green globules, from which it may be extracted by ether," is Graham's statement. (Chem., p. 907.) Hare further states that it combines with bases. Berzelius calculated that all of the leaves of a large tree did not contain ten grains, so potent is its coloring power. And it is quite certain that it is not a unity in chemical composition in different vegetables, for that from fresh leaves dissolved in acetic acid shows a brilliant grass-green, the same, after drying, dissolved in the same acid, assumes an indigo-blue, while that from dark-leaved plants is brownish green.

"None of the operations of nature are more inscrutable than those by which organic substances are endowed with the immense variety of colors with which vegetables and animals are adorned. The chemist may know how to elaborate dyes, to fix them, and in fixing them, by the interposition of mordants, to vary their hues; but, excepting the influence of transparent media, or of crystalline structure (humors of eye, etc.), in dispersing refracted or polarized rays, he is still quite ignorant of the differences in the arrangement of particles which give rise to diversity of color; or of the mode in which chemical combination causes the various colors of precipitates."—*Hare*, 419.

These facts in regard to chlorophyl, from which Prof. Hough observed the development of certain animalculæ, point, it seems to me, to the chemical complexity of the material from which alike the first and advanced stages of life are developed, as the most important fact in regard to it.

Take the poultry egg for study from this point of view. The shell merely serves as a mechanical support and protection to the chemically complex matter within. Break it open: a colorless fluid envelope, which is called albumen, presents itself; then a yellow matter in a delicate envelope or membrane, having an opaque spot, called germinal. The material of this yellow matter is very complex—C. H. N. O. + S. + P. Cx. Fe. So. Po., variously combined, yet H. O. largely predominating in total weight, viz., 72.53 parts in the hundred. What does it all mean? Why, that here is the material in which is stored up the guiding energy to form the structures of a chick when a uniform and equal motion is maintained by external heat—that is, again, simply motion of matter.

I had brought to my office, not many days since, a branch of a grape-vine, having imperfectly (and yet to me they seemed really perfectly) formed grapes, partly developed on leaves, leaf-stalks, twig, and supports. Here the material in which was stored up the guiding energy to carry new material into perfectly formed bunches of grapes, arranged on a stalk, was misplaced—was scattered, or distributed, so to speak, over the stalk, or branch, and leaves—with the result that grapes were formed, perhaps imperfectly formed, out of place; and it was called a deformity, a vegetable monstrosity.

And these facts (contents of the egg and these misplaced grapes) point to the central fact or condition, which I wish to make prominent, viz., that in chemical complexity of material there is stored up the guiding energy, force—life or vital force, so to speak—of all the varied forms of organic life, animal and vegetable. And this fact (storing up force) is one that is almost never insisted on by investigators of the forms of life, whether in its first or more advanced phases. It seems to me that it throws much light upon the occult operations of nature in the construction of the varied forms of organic life.

A little boy relative exhibited to me, a few days since, his purchases of fire-works for the Fourth of July: fire-crackers, big and little; serpents; torpedoes; Roman-candles, etc. These merely stored up force for sudden explosions, so called, *i. e.*, high rates of instantaneous motion in their matter, which is communicated to the atmosphere, for the production of sound, noise; the motion of matter in the fire-crackers being direct and straight from the center; in curves for the "serpent;" and more slowly for the production of colored light in the Roman-candles.

A wood-worker exhibited to me, within a few days, too, a new machine for carving. This, like the fire-works, merely stored up the guiding force, energy, to direct straight motion in matter, so as to produce pleasing forms of structure in "furniture."

Now, apply this idea of "storing up force" to the problems involved in the study of the *modus operandi* of medicines, or, more broadly, "remedial agencies," and a flood of light is poured into the hitherto impenetrable darkness surrounding the whole subject.

But the *modus operandi* of remedial agencies is neither an isolated nor exclusive branch of knowledge. Conceptions here depend on other conceptions of the histogenesis and hystolysis of living tissues, and the way in which they perform their functions, and provide for their renewal from new material, and ultimate perpetuation and multiplication.

Are living tissue and viscera constructed from the food eaten, as the plasterer coats the walls of our houses with his trowels? or are they constructed by means of its chemical complexity, and subsequent decompositions and recompositions; each atom or compound atom, or molecule, as the compound atom is designated, taking its place in tissue and viscera, in obedience to the guiding energy stored up in part of its material? The question needs only to be stated to be unhesitatingly answered by the latter mode.

Here the further question would be pertinent, if asked: in what part of the material from which living tissue is made, is this guiding force or energy "stored up?" This was answered more at length in a communication published in this journal July, 1871, p. 383. It may be stated here that it is in the lymph; and lymph is animal seed, the exact equivalent of a vegetable seed, which stores up in its material the guiding energy—supposed vital force—to carry its own and new material up to the forms of structure from which it was derived.

One more question. How do organic tissues and viscera perform their functions—at the direct expense or waste of their special molecular structure, like a candle in giving light? or, like a lamp, only supplying conditions for chemical transformations of other matter, the lamp itself taking no actual part in them by supplying material to be changed?

All the facts of life, combined synthetically, or separated analytically, point to the former mode, *i. e.*, the candle; so much function, so much special structure chemically changed to simpler states, the equivalent of force, the amount of function performed.

It is determined, too, philosophically, because function requires special forms of structure, whether in organic or inorganic nature. The many functions performed by iron in civilization, all require special forms of structure, and perform duty at the expense of the material of structure, as much as living flesh. So of our houses, furniture, clothing, jewelry, etc. So of continents, seas, mountains, plains, etc.

These greater conclusions, alike of rigid science and flexible philosophy, point to the facts that in living bodies there are but three fundamental factors, viz., materials, forms of molecular structure (or design), and physical motion in materials, ascending to, while in, or descending from their complex chemical condition in living tissue. Our power, as physicians, does not include the creation of material, nor the working of materials into organic forms of structure, except through natural modes; nor the creation of the force which gives them motion in structure. It simply lies in a partial control of force—motion in the materials of organic or living tissues or structures.

The formula, therefore, that remedial agencies have power only to advance, retard, or modify the velocity of physical or chemical motion in the materials of living structure, may be considered to include, with rigid scientific accuracy, all the powers possessed by the whole range of the materia medica and remedial measures, past, present, and future, until the universe is reconstructed, and it comes under the dominion of other and different laws from those now in force for its government.

Therapeutic agents, drugs, and medicines may be defined as "material, storing up force, which, when brought into contact with living tissues, advances, retards, or modifies the existing velocity and mode of motion in their materials."

And thus the whole catalogue of drugs, medicines, and remedial measures should be classified, as into one or the other of these three classes all remedial agents may be arranged, modified only by quantity introduced at one time, so as to keep within the limits of life in interference with the velocity and mode or modes of motion on which it depends. Strychnia, for example, in one quantity, advances motion within the limits of safety; in another, beyond them, and then its effects are said to be poisonous. Opium, again, in a certain quantity, retards motion which is in excess, within safe or safer limits; in another, below them, and it, too, is poisonous. Again, vaccine lymph or matter advances and modifies both motion in, and the structural arrangement of, the matter of living tissue; as do also the materials which store up the modes of force producing the phenomena of the so-called eruptive fevers, often beyond the limits of life, or healthy or physiological life. These all have velocities of motion above the normal standard, while the matter producing the phenomena designated syphilis, though disturbing the velocity of normal motion but little, yet so modifies its mode, as to change the structural arrangement of the material of living tissue in such a manner and to such an extent as to suspend one normal function after another, until death results—and results from loss of normal molecular arrangement of the matter of structure.

Prof. Hough thinks pepsin may be useful at one time, or under one set of conditions, and useless when they are changed. I apprehend the sole function of pepsin to be to redissolve albumens and fibrins which have been coagulated by heat, so called—in fact, motion of matter which changes their molecular arrangement; for heat is but a mode of motion in or by matter.

Whoever has pepsin sufficient to perform this function, does not need, and can not be benefited by increasing its quantity from the sheep or pig.

In fact, accepted physiology, in regard to so-called digestion and nutrition, sadly needs an entire remodeling. It does not, as now taught in text-books, represent the facts of the repair of structures as they waste in the performance of natural functions.

Interesting as the subject is, I am not unmindful that we are in the midst of the "heated term"—conditions of nature not favorable to study—and so must be brief, if I would be read.

I hope to send you a paper on "The Conditions of Life," which is nearly complete, with the return of physical conditions favorable to study.

Art. II.—A Case of Irrepressible Vomiting.

By E. C. BAIN, M. D., Pleasant Plains, Ill.

On 17th of February, I was called to see Miss M. I found the young woman going about, and nothing apparently wrong. The mother told me that her daughter had been "exposed to the cold and damp weather; had caught cold and missed her last monthly period." She also told me this had been frequently the case with this daughter, who was aged about twenty years. However, I had some doubts as to the cause. I prescribed mur. tr. ferri and pil. hydg., to be administered as required, with directions for bath, etc.

The girl left home the next day on a visit to a sister, and I heard nothing more of the case for nearly a week, when I was again sent for. I found the girl vomiting about every ten minutes. Everything apparently which was taken, was rejected; the smallest quantity of fluid seemed to produce it. She had eaten nothing, as she stated, for several days, and the dejections were composed only of bile and the fluids swallowed. This continued for about ten days, nothing being retained apparently, with great aversion to food. I had concluded that it was a case of pregnancy, with irrepressible vomiting; but disliked to intimate such a thing, as the family were well and extensively connected—the mother and daughter being members of the church and moving in the best society.

About this time salivation came on with great fetor of breath. I then became perfectly satisfied as to the *cause* of her disorder, but felt a diffidence in communicating the facts. I concluded that the most delicate way in which I could do so, would be to put Meigs' work in the hands of the mother. This I did on my next visit, with certain pages marked, with the request that the mother would read them to the daughter.

On my return I found the girl in tears. The mother absented herself from the room—rather an unusual thing for her—and I questioned the daughter. She admitted she had risked herself and begged me to retain secrecy; stated that her mother knew nothing of the matter; and mentioned the time, place, and party. Here I may say that she charged a minister with the parentage, and from the circumstances suppose she told the truth.

She was becoming much emaciated; could raise her head at no time without fainting, and no relief was obtained by any of the remedies usually tried in such cases. Temporary relief, and rest, I could occasionally obtain by anal injections of cold water and sul. morphia; but her bowels were naturally constipated, and I could not often resort to this. Her salivation was so great that it was with difficulty she could swallow, and she was spitting up about a pint of saliva a day. After this vomiting had continued for about twenty days, her father, a man of rather fine feeling and of taciturn nature, came to me, and after much hesitation asked me if there could be "anything wrong with the daughter, anything there should not be?" He said he had reasons for asking, and I felt it my duty to tell him, provided I could do so without injury to the daughter in her then low condition. He promised entire secrecy, upon which I informed him of the whole as told me. He wished then to know if I would not produce abortion, and thereby save the reputation of his family. This I informed him I could not do to save any one's reputation. I told him it was sometimes done to save the mother when in his daughter's condition, but I wished yet to wait; that as a last resort, I might deem it expedient to resort to mechanical means in order to save her life. The father left his house in a few hours, and when found late in the evening of the next day, had shot himself through the brain with a navy pistol!

When the news was brought to the house of the finding of the father's corpse, the daughter fainted. As often as she would revive she would again faint, until uterine hemorrhage occurred. I was afraid for her to lose much blood in her very low condition, so I introduced a tampon of common rags. This was about nine in the evening, and I took it away next morning. On extracting the last piece, there was attached an ovum of about two and a half months. There was no more hemorrhage or discharge from the os; the vomiting ceased; the salivation and fetor of breath was soon gone; and in eight or ten days after her great prostration, she was able to sit up, and in three weeks was apparently as well as ever in her life.

Four weeks after her abortion I was sent for at midnight to see her, and found considerable uterine hemorrhage. I found on examination that the os was sufficiently dilated to introduce the index finger; I administered a dose of secale cornutum, and soon the placenta was cast off entire, and without any indication of *decay*. She was soon up, and it is to be hoped will live a better life.

Art. III.—The Treatment of Cholera Infantum.

By Dr. ADOLPH WERTHEIMBER, of Munich (Jahrbuch Kinderkrankh).
Translated by Prof. WM. H. TAYLOR, Miami Medical College.

Cholera infantum belongs to that class of diseases in which the preservation of life depends in great degree upon proper and decided treatment. Inactive expectancy and undecided therapeutics are alike injurious.

There is very general agreement as to the *indications* to be fulfilled, but not as to the *means* for meeting these indications. As is well known, cholera infantum leads in a brief period to the most serious conditions—partly the result of increased viscidity of the blood, from the loss of its watery portion, but chiefly from the diminished energy of the heart's action and the impeded circulation through the lungs. The most important problem in treatment is to avert the threatened collapse; to do which, the *causes* of the collapse must sometimes be disregarded. From the means with which we are in the habit of treating vomiting and diarrhea, *i. e.*, opium, mercury, etc., we can hope for beneficial results only in the early stages and in mild cases; but if symptoms of paralysis of the various organs appear—especially if indications of cerebral effusion, as drowsiness, imperfect intelligence, or convulsive movements, exist—or if the breathing is irregular, or the temperature below normal, opium is clearly inadmissible, and even early in the disease it must be used with great care, for its influence over respiration increases the tendency to collapse.

The question presents itself as to what is the best means to prevent collapse; in other words, what means is best adopted to accomplish the object of treatment, without exerting an injurious influence upon the diseased parts? The most common and most trusted are alcoholic stimulants: to ignore these would almost appear to be in opposition to the most approved treatment; yet, from my own experience, this preference for alcohol is not based upon good grounds—indeed, I am convinced that spirituous stimulants, especially wine, can not only be dispensed with, but are actually injurious, particularly in their local influence in the choleraic intestinal catarrh of infants—but independent of this, alcohol seems inappropriate, because of the hydrocephaloid phenomena, which are likely to present themselves.

As stimuli adapted to the cases under consideration, I prefer black coffee, ammonia, and tea. The former, however, does not deserve all the commendation it has received. In addition to its vitalizing influence upon the heart and pulmonary circulation, *ammonia* possesses the valuable property of neutralizing the acidity of the alimentary canal, resulting from the fermentation of undigested food, thereby removing injurious influences often present. The preparations which I use are liquor ammonia anisatus, and liquor ammonia carbonici, usually in combination with decoction of salep and simple syrup, so combined as to give two to six drops of the alkali every hour or two. So long as there are no indications of cerebral complications, small doses of tincture of opium may be added.

Not less valuable than ammonia is *tea:* the two remedies given in alternate doses supplement each other to a great degree; for while the ammonia acts on the heart and pulmonary circulation, the tea exerts its influence upon the brain; in fact, it is *the most reliable means to remove the tendency to somnolence and to restore con-*

sciousness, besides which it arrests vomiting and diarrhea—in this respect being superior to coffee.

To obtain the full effect of tea, it is essential that a genuine and good article of black tea be used.

Children with cholera infantum suffer from intense thirst, and take with avidity any fluid offered them. The usual fluids—decoction of salep, rice-water, etc.—are of no special value, and if used in considerable quantities, especially if warm, are usually followed by vomiting. Instead of these fluids, I now use cold tea of ordinary concentration, without any addition, as a drink. I have allowed children from eight to twelve months old to drink two teacupfuls or more during the day, to the exclusion of all other drinks. Among these cases were some which seemed to be in a really desperate condition, and to whose recovery the above-detailed treatment seemed to contribute in a great degree.

As important adjuvants to the internal treatment, I regard frequently repeated applications of large mustard plasters (which are preferable to mustard baths), and assiduous friction of the surface with aromatic spirits, afterward enveloping the body in warm cloths.

But little need be said of diet. In severe cases it is better to give little nourishment: but as the disease subsides obviously, the best nourishment is mother's milk; and in the numerous cases where this is not available, I give meat broths, with tapioca or arrow root, to which may be added, as convalescence advances, Liebig's, or other nourishment. Where no preparation of milk is borne, minced raw meat is often a useful substitute.

Deaths from Snake-bite.—It is stated, says the *Homeward Mail*, that in the Tanjore district no fewer than nineteen persons in every 100,000 die annually from snake-bite. Taking the population according to the census, this would give nearly 330 deaths per annum in that district alone; and assuming the rate of mortality over the whole presidency of Madras to be only half that which prevails in the Tanjore district, and the population to be 30,000,000, we get the startling total of nearly 3,000 people annually dying from snake bites.

Translations.

Department of Medical Jurisprudence.

By ROBT. M. DENIG, Columbus, Ohio.

POISONING BY NITRO-BENZINE.—Cases of this kind are still rare, notwithstanding the extensive use of this substance in commerce under the name of *mirbane, artificial* essence of bitter-almonds, etc. The following case (Annales d'Hygiene, Paris, April, 1873) is interesting from the singularity of the symptoms and the careful autopsy of the cadaver. A laborer, R——, robust in health, 25 years old, engaged in a laboratory where this article is manufactured, was observed by the other men, on their quitting work about 11 o'clock A. M., to drink something from a small flask. On arriving at his home to dinner, nothing peculiar was observed about R—— except the strong odor of bitter-almonds which he exhaled, and a slightly bluing tint of the face. He ate dinner as usual, and afterward lay down to take a sleep. At a quarter of two his wife tried to awaken him, but was unsuccessful. He sighed several times, shook his arms, and drew them closely to the body. Remembering that her husband had mentioned his having drank some *eau-de-vie* of bitter-almonds, they tried to vomit him, but did not succeed. At four o'clock he died so quietly that his wife only perceived it on again trying to awake him. No physician was called. Autopsy was made forty-three hours after death. Cadaveric odor; considerable rigidity; cadaveric lividity well marked, extending over the whole posterior surface; rest of the skin, especially of the face, remarkably pale; abdomen flat; discharge of semen from flaccid penis; strong injection of pia mater of brain and cerebellum; lateral ventricles filled with transparent serum; cerebral substance dense; no odor of bitter-almonds from any part of brain; muscles of thorax and temples of well-marked brown color, dry and dense; lungs hyperæmic, especially posteriorly and below; blood black-brown, fluid; pericardium contained a teaspoonful of clear serum; walls of the heart dense and almost as brown as the muscles of thorax; left heart empty; right heart, especially the auricle, filled with black fluid blood; no clots; no odor of bitter-almonds in thoracic organs, but very obvious on opening abdomen; stomach exhaled the odor strongly; mucus membrane, especially near cardiac orifice, of a uniform brownish color; veins full; chemical analysis demonstrated the presence of nitro-benzine in contents of stomach, and in the remains of the contents of flask from which R—— drank.

The general symptoms of poisoning from this substance are headache, vertigo, uncertainty of muscular movement, obscuration of the senses, sleep with anæsthesia and tendency to coma; often cyanosis, with dilation of the pupil, whilst vomiting and convulsions are far from being constant. Several observers have pointed out a bloated appearance of the face, with a cyanotic tint. In Schenck's case, in which a vein was opened, the blood ran very slowly, was of a black-brown color, and showed no signs of coagulation.

Dr. Starkow (Annales d'Hygiene), in a note, presents the following valuable consideration on the use of the spectroscope in detecting poisoning by the benzine and nitro-glycerine groups, also pointing out their relatively toxic properties:

I. The substitution for the hydrogen in hydrocarbons of the radical NO^2 modifies the primitive character of their action, and increases their toxic properties, provided they are sufficiently soluble; at the same time the nitrous products produce on the blood a new modification belonging neither to the hydrocarbons nor the chlorine products, and essentially different from this latter. Thus in all animals poisoned with nitro-benzine, the blood shows without exception between the two oxyhemoglobine rays, an absorptive ray upon the limits of the red and orange part of the spectrum corresponding to the line C of Fraunhoffer.

The same ray was obtained on adding binitro-benzine to blood drawn from a vein. The substitution of bodies such as sul. of am., or an ammoniacal solution of tart. ferri, carry this ray a little to the right; ammonia causes it to disappear, and leaves only the two hemoglobine rays; at the same time the solution takes a brilliant cherry red, and becomes more transparent. With nitro-benzine, and nitro-aniline, and nitro-naphthaline, in which a single H is replaced by the radical NO^2, the same ray is still seen in the hematine acid ray, but less marked in the blood of animals poisoned by it. In making the mixture *artificially*, external to the vessels, it does not form immediately, but becomes obvious after some hours. Corresponding to these characters, the toxic action of these substances is much more feeble than that of binitro-benzine. Chloro-benzine and benzine are much excelled in the intensity of their action by nitro-benzine, and have not the preceding action on the blood. In the spectrum are found only the two oxyhemoglobine rays re-acting normally under the influence of the restituent means. This dissolving effect upon the blood globules is especially marked with chloro-benzine; the field of the microscope being immediately occupied by these crystals, not a single blood globule remaining. Binitro-benzine, on the contrary, allowing these globules to remain intact, they were only diminished in size and rendered more definite. With nitro-benzine there existed still a small quantity of blood globules, generally modified, as with binitro-benzine.

II. The effects of aniline upon the blood are similar to those of ammonia and phos. hyd. (P. H_3) It destroys the hemoglobine, without producing the hematine ray. In mixing it with the blood the latter is profoundly disorganized. Neither destroyed blood globules nor crystals of hemin are visible; but the protoplasms become free from small islets with badly defined edges upon a troubled and sedimentous background.

Nitro-aniline produces modifications similar to both aniline and binitro-benzine. Sulphate of aniline develops without exception a ray of hematine acid, whether administered to living animals or mixed with the blood external to the vessels.

III. Binitro-benzine presents another remarkable peculiarity, which is, its strongly poisonous qualities, notwithstandlng its feeble solubility.

IV. The chemical action of nitro-glycerine on the blood pigment is analogous to that of nitro-benzine. Their toxic properties are almost identical; nevertheless the latter is more intense, notwithstanding its feebler solubility. Thus three grains of nitro-benzine introduced into the stomach of a dog were fatal in their effects.

It can not be denied that the toxic properties of certain organic compounds proceed from new properties resulting from the substitution of the radical of ozotic for the H of the primitive bodies. Thence also the toxicity of nitro-glycerine, which has recently attracted the attention of toxicologists. This substance can no more be classed among nervine medicine.

NITRO-GLYCERINE.—Dr. Honert reports a case of poisoning from nitro-glycerine, the second, he states, which has occurred. A man took a table-spoonful of gunpowder for a boil; and in order to increase the effects of the remedy, a small portion of nitro-glycerine was afterward swallowed. He was immediately seized with great nausea, accompanied with repeated violent retching and vomiting, headache, dizziness, and occasional unconsciousness. Great excitement was set up, especially in the vascular system; perspiration rolled in streams from his face and limbs. After some time he became paralyzed. When Dr. Honert saw him, four hours after taking the poison, the whole voluntary muscular system was paralyzed, except the muscles of the face and eyes, which were only measurably affected. Deglutition was extremely difficult; heart labored; pulse 39, hard and full. Twenty hours after taking it, the pulse was 70, then 90, and the symptoms of poisoning gradually disappeared.

Mr. E. Nyström, of Sweden (also quoted by Rept. of Med. & Surg., Sydenham publication), contributes an important paper on the toxicology of this substance. He points out the great danger involved in the extensive use of such a poison—sweet, colorless, and apparently innocuous. Already have three deaths occurred in Sweden from its administration. Mr. Nyström himself took a little more than the size of a pin's head. He perceived immediately a sweetish taste, then an uncomfortable sense of irritation in the throat, and after five minutes, headache, painful throbbing in the temples, and contraction of the masseter muscles, all of which symptoms disappeared in the course of an hour.

The first case of poisoning that occurred in Sweden by nitroglycerine was that of a girl aged thirteen years, who died in 1864 from drinking the poison from a flask. The second was that of a railway engineer, who fatally poisoned himself by mistaking it for beer. In an hour he was blue in the face, and speedily became delirious, insensible, and comatose. His hands were frequently raised to his head; the face became red and swollen; there was dyspnœa, with loud mucous rales over the chest; and death ensued in six hours from taking the poison. On post-mortem, the brain and its membranes were found encysted, and yellowish serous fluid in the ventricles; the trachea, stomach, and kidneys hypermæic. In a third case, a peasant had died in two hours from drinking an unknown quantity, mistaking it for brandy.

INFANTICIDE BY NEGLECT.*—Marie Toulouse, a chambermaid of

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*The following report is very interesting, from the able manner in which many knotty points are discussed; but especially as presenting a violent con-

General D——, at Alger, had formed very intimate relations with a Zouave soldier. The latter (the soldier) left Alger to join his regiment, at Rome, in June, 1867. On the 8th of December following, the chambermaid, Toulouse, was delivered in the night, alone, and without calling for any assistance. According to her own statement, she was seized with colicky pains toward midnight, and to satisfy, as she supposed, an urgent demand for the use of the night-stool, had placed herself upon it. She professed to be entirely ignorant of being pregnant, as she had several times since the month of June a discharge of a catamenial character. The accouchement or delivery had occurred at the time when she was using the night-stool, as she supposed for the purpose of relieving her bowels. After being delivered, she cut the cord; and, being immediately overcome by a faintness, she left her child lying upon the floor, threw herself upon the bed, and remained in a state of unconsciousness for two hours. On her return from this unconscious state, she found her infant dead; that she had thrown it into an almost abandoned water-closet, where it was afterward found lodged in the pipe, a short distance below the seat. Such are the principal circumstances, in relation to which the Medico-Legal Society of Pariswas consulted, and on which Mons. Tarnier, in behalf of the permanent committee, made the following report. He says:

"Our president, M. Devergie, has received from Dr. Bertherand, of Alger, a memoir, which that physician submits to the examination of the society, desiring it to transmit to him the opinion of the society on the facts referred to their consideration. I have been appointed by our president to make this report, to be submitted successively to the members of the permanent committee and the society itself. The charge is one of infanticide. The following are the principal facts, which I gather both from Dr. B.'s memoir and the report of the judicial proceedings held in the case, and which complement the memoir, supplying the deficiencies in it.

"On the 10th of December, 1867, a workman, employed for the purpose of removing some obstruction in the waste pipes of a water-closet in a house situated in Alger, No. 3 Buuce street, found the body of a new-born infant, utterly naked, at about one metre

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trast between the able, careful, and judicious manner in which such things are conducted in France, and the slovenly, loose, and unscientific way in which they are done here.—R. M. D.

beneath the seat. A female domestic belonging to the house, Marie Toulouse, twenty-one years of age, being suspected, and questioned on the matter, acknowledged that the child was hers; that she had given birth to it about midnight on the 8th of December.

"According to her deposition, she did not know that she was near the termination of her pregnancy; that, seized with pain in the bowels, of which she did not comprehend the import, she had been delivered on a night-vessel, on which she had placed herself. After having cut the umbilical cord, without first tying it, the accused contended she was seized with a faintness, so sudden that she had scarcely time to throw herself on the bed, where she remained for two hours in a state of perfect unconsciousness. When she returned to herself, she found her child dead, in the exact spot she had left it, that is to say, on the carpet. It was already cold, she says, and without life; that, in despair, and scarcely conscious of what she was doing, she had thrown it into the water-closet. Dr. Bertherand, as he sets forth in his memoir, had found, upon examination of the girl, all the signs of recent delivery—tumefied vulvæ, developed uterus, fourchette recently slightly ruptured, sero-sanguinolent lochia, secretion of milk, etc.; all these facts establishing beyond question a recent delivery. The examination of the infant established the following facts: that it was a female child, having a total length of 48½ cen. ( ); that it weighed 2 kill. 400 ; the scalp covered with hair; the nails extended beyond the ends of the fingers. There were no ecchymoses or bruises about the face or neck, nor any other signs of violence; there was no scalp tumor present, as is often the case in protracted labor. In making the post-mortem examination, Dr. B. found no lesion which could account for the death of the infant. The brain and liver were gorged with blood, and the heart and large vessels moderately full. The lungs were filled with air, and floated when placed on water. No mention is made of sub-pleural ecchymosis. From these facts, Mons. B. draws the following conclusions:

"1. The child lived after birth. 2. The sanguine color of the principal viscera, and the fullness of the heart and large vessels, remove all suspicions of death from hemorrhage from the umbilical cord. 3. The absence of all traces of violence, as well as spontaneous disease, induces us to ascribe the death to the influence of cold—more particularly as the temperature was as low as 10 or 12°

above zero. 4. It is quite in accordance with the facts and circumstances of the case to say that *infanticide* by omission had been committed.

"After the establishment of these conclusions, the body of the child was interred; but was exhumed at the requisition of the judge of instruction (as he is called in France) on the 18th of the month, in the presence of Drs. Frison and Trollier, professors of the medical school of Alger, who were charged with making a re-examination and report of the same. As decomposition had at this time commenced, the investigation was rendered more difficult.

"The new experts, however, found no trace of violence nor ecchymosis. The part of the umbilical cord still adherent was not ligated. The hydrostatic test established the fact of the child's having lived after birth. The lungs were in a congested condition, as often seen in asphyxia. The heart was empty. From these facts, MM. Frison and Trollier concluded that the child had lived and breathed after birth; death appearing to have been the result of *asphyxia*. The absence of a ligature on the cord might be a cause of imminent danger. In the absence of any external signs of violence, and in the actual condition of the cadaver, it was impossible to say whether the death of the infant ought to be attributed to *crime* or *accident*.

"Some days subsequent to this report, MM. T. and F. were required to reply to the following interrogatories:

"1. Is it possible that a child, fully developed, born at full time, as the one under question, could die in two hours after its birth, simply because it had not received the necessary attention its condition required?

"The reply of these experts was, that, in the particular case under consideration, death could be explained neither by the influence of cold nor hemorrhage from the cord.

"2. A woman, whose delivery is very rapidly accomplished, and without loss of consciousness, could she lose her consciousness after the delivery, and remain in this condition for the space of two hours?

"The reply of the experts was, that, in this case, the loss of consciousness could be attributed only to syncope or eclampsia, per convulsion. Now, convulsions would have left the woman in such a condition of health, or rather of disease, as would not have permitted her to remove the evidences of her accouchement. As to syncope, it could not be of very long duration. According to their opinion, if there was syncope, it could have lasted but a short time; and under no circumstances could the mother have remained two hours wholly unconscious.

"So far, gentlemen," says Dr. Tarnier, "in making this report, I have acted simply the part of a narrator. My duty now becomes more difficult. You have remarked that Dr. Bertherand, on the one side, and MM. Trollier and Frisson on the other, after having established the same facts, draw from them entirely different conclusions. It is for the purpose of sustaining his first conclusions that Dr. B. has addressed us the memoir, which I shall take occasion to recite and analyze hereafter. It is always difficult to act as umpire on two contradictory opinions, when they emanate from men equally learned and conscientious, and convinced of the correctness of their views. The difficulty and gravity of the umpirage is vastly enhanced by the consideration of the weighty matter on which we are called to decide. The questions which now agitate us, in a purely scientific point of view, may become means in a court of justice powerful for defense, or weapons of accusation. In the face of such responsibility, I would again state that this report is the work of the entire permanent committee, and that, before denying or affirming any proposition, all doubts have been removed from the minds of your committee. The memoir of Dr. Bertherand bears upon five principal points, which we have formulated into as many different questions, and endeavored to answer.

"*First question.* Can a woman be ignorant of the date of her pregnancy, the progress and duration of her accouchement?

"*Ans.* There is no doubt that a woman may be entirely deceived in regard to the time at which her pregnancy commences. All accoucheurs have observed a great number of these errors, especially when the menstrual function has persisted during the early months of pregnancy. At other times, hemorrhages, returning at irregular intervals, may be mistaken for the true menstrual discharge, and may remove all suspicion of a pregnancy which has already had several months' existence.

"The accused, Marie Toulouse, like a great number of other females, might be deceived in regard to the commencement of her gestation; and this hypothesis is the more admissible, as, during the course of the summer of 1867, she suffered from irregularity of the menses, both in time and quantity; and had, after the commencement of her pregnancy, according to the declaration of one witness, two different attacks, accompanied with considerable loss of blood.

"If we add to these considerations that the accused was only twenty-two years old—a primipara; that, as she had not confided to any one her secret relations with her lover, she could not consequently ask such questions as would have dispelled her doubts, without exciting suspicion as to her real situation,—we can, without difficulty, admit that the woman, Marie Toulouse, might have been ignorant for a considerable time that she was *enciente*, in which error the sanguine discharges she had suffered would confirm her; more particularly as she had suffered so little enlargement in her person as not to excite suspicion in any one of her real condition.

"At what period, then, was she conscious of being pregnant?

"It is impossible, we conceive, to fix the exact date. It is clear, from reading the account of the proceedings in the case, that, at the departure of her lover, on the 15th of June, she had not spoken to him on the subject; and it is only on his return in the month of November that she intimates to him her suspicions, without assigning any particular time at which her accouchement would probably occur.

"We, for these reasons, agree with Dr. Bertherand in the opinion that the accused might have been ignorant of the date of her conception and the probable time of her confinement; but, on no account, can we admit, as he does, that she thought herself only five months advanced, when she was surprised at finding herself in the pangs of labor; nor can we forbear to remark that there was a period of six months and one week between the 15th of June and the 8th of December, the time of her delivery.

"As to the progress and duration of the accouchement, we again agree with Dr. B. and with other medico-legal gentlemen, and expressly with Drs. Tardieu and Lorain, that some women give birth with such extreme rapidity that, misinterpreting the premonitory signs of labor, the child might be born before they were entirely alive to the true nature of their situation. In this particular case, the accused, it is true, had experienced some slight colic pains, as she termed them, during the day of the 7th of December; but she might easily be deceived as to their true nature, as many women have been. We may readily conceive that the infant might be suddenly expelled at the moment she had recourse to the night-stool, for the purpose, as she imagined, of relieving her bowels.

It is proper to remark, however, that these sudden deliveries occur more frequently with those who have already borne children than with primiparæ or first labors. It would be unjust, we think, to refuse the benefit of these well-known facts to an inexperienced and ignorant girl, who is delivered alone, in the night-time, and at a moment when she believed herself still far from the end of her gestation.

"*Second Question.* Did the mother lose her consciousness, after her delivery, for some hours?

"Loss of consciousness does sometimes follow delivery, and may be owing to two causes—convulsions (called eclampsia) and syncope or fainting.

"MM. Frison and Trollier, and also Dr. Bertherand, agree in excluding the first hypothesis—eclampsia. We agree with them perfectly in rejecting the possibility of convulsions having been present. There remains, then, only the supposition of syncope having lasted during a period of two hours.

"MM. Frison and Trollier conclude, in their report, that, if there was syncope, it could have lasted but a short time, and under no circumstances could the mother be supposed to have remained two hours in a state of complete insensibility. Dr. B. takes issue in his memoir with his confreres; and, to strengthen the force of his opinion, cites the opinions of several medico-legal gentlemen—among others, Casper, Devergie, and Lorain, who admit that syncope may follow delivery, especially if accompanied with hemorrhage. The point in dispute is important, and demands a careful examination. Accouchement is quite often followed by a state of stupor and confusion, during which the mother, without losing entirely her consciousness, is incapable of bestowing on her infant the care which a new-born child requires. But this state is not prolonged generally beyond a few minutes. A true syncope, or prolonged fainting, without severe hemorrhage, must be exceedingly rare. We *can*, however, cite some examples of it. Cazeaux gives a case as occurring in his own practice, and M. Depeau has met with a few similar occurrences; and I may add that I have also met with one case of the kind. This state of prolonged syncope is always grave, and terminates either in being fatal, or leaves the woman in such a condition of prostration as to render impossible, for some time after, the least muscular exertion. The accused, Fille Toulouse, was able to get up—to ascend two flights of stairs. It is then quite improbable that she had been a prey to the *grave syncopal* state we have had under consideration.

"Syncope, which accompanies or follows hemorrhage depending on delivery, is, on the contrary, very frequent; nevertheless it is rare that the loss of consciousness is prolonged for two hours; and in this latter case it must be the result of very profuse hemorrhage. Let us examine, then, if there are any proofs of excessive loss of blood at the moment of delivery. Almost always in accouchements even the most regular, the delivery of the secondaries or after-birth is accompanied with a profuse gush or flow of blood.

"The allegations in the act of accusation set forth that during the delivery of Marie Toulouse a shirt and two skirts were soiled with blood: in a severe hemorrhage the mattress would not only have been soiled also, but would have been, in all probability, entirely soaked through; but we do not find any indications of this in either of the communications transmitted to us. It is, then, difficult, with the information before us on the subject, to say to what extent hemorrhage was present. We may say, however, that the amount indicated above does not equal, much less exceed, what is generally present in most normal and regular labors. In a word, there are no proofs given that the hemorrhage was at all excessive; nor does Dr. B. refer to any remarkable pallor as existing in the accused, a condition which universally obtains in those who have largely lost blood; a condition which, had it been present, we may readily suppose would not have escaped the attention of as sagacious an observer as the gentleman mentioned. According to our opinion, then, there is no proof that the woman suffered from prolonged syncope.

"*Third Question.* Can the death of the infant be attributed to any external injuries?

"In order to resolve this question it is sufficient to recollect that MM. F. and T. and Dr. B. have unanimously agreed that the body of the child presented no traces of violence. This question is easily answered in the negative.

"*Fourth Question.* Can the death of the child be referred to accidental causes, such as absence of ligature on the cord, the depressing influence of cold, etc.?

"Numerous recent experiments enable us to affirm that the failure to ligate the umbilical cord does not necessarily result in fatal hemorrhage, especially if respiration be well established. Now, in regard to the case under consideration, the examination proved that respiration had been fully and completely established. In some cases, however, and especially when the lungs have not been fully inflated, the absence or imperfect application of the ligature may give rise to fatal hemorrhage. Such occurrences have been noticed by different authors. According to M. Tardieu, the loss of blood need not be very large to destroy the infant; also, that under these circumstances the body of the child does not present that bleached and waxy appearance so characteristic of adults who have succumbed to bleeding. But that which appears to have most attracted the attention of M. Tardieu, and which appears to him to constitute an essential sign of umbilical hemorrhage, is the *discoloration* and *absence* of blood in the *liver*, which in the normal state of a new-born child is so congested and of a color so well marked. You have not forgotten, gentlemen, that in the child of Marie Toulouse the liver was really in a highly congested condition, according to the report of M. Bertherand. We see, then, ourselves conducted to the conclusion that the child did not die from umbilical hemorrhage, to which it was exposed from the absence of a ligature on the cord. Moreover, the cord had a length of 30 cen. (———), which alone would render the bleeding difficult. Exposure to cold, either through negligence or criminal intention, can also be a cause of death. All medico-legal writers admit this; and this is the cause invoked by Dr. Bertherand in his report, whilst it is repelled in that of MM. F. and T. In endeavoring to determine on which side the truth is found, let us examine, in the first place, what are the principal lesions found united in a case of death from cold. The body is generally of a dead white; the cellular tissue infiltrated with serum; the lungs are almost always engorged, sometimes hepatized. They are engorged with black blood, as well as the large blood-vessels. The liver is red and hyperæmic. Such are the lesions pointed out by Dr. Tardieu. This being conceded, we find analogous lesions admitted as present in the reports of all the experts who have examined the body of the dead child of Marie Toulouse, since they all concur in saying that the liver, lungs, and large vessels are engorged with blood.

"The analogy of these lesions does not establish, however, conclusively, that the death of the infant was due to the influence of cold. It is important, then, to examine other accessory circumstances made known to us by the reports of these gentlemen. The memorial of Dr. Bertherand proves that on the 8th of December the temperature had fallen to 11° or 12° above zero. At this temperature, and restricting ourselves to the terms proposed by the judge of instruction to MM. F. and T., would an infant just born, exposed naked on the floor of a close chamber, die in two hours from the effects of the cold?, This question is difficult to answer, because we are wanting in scientific data by which to determine it. It is certain that under similar circumstances vigorous children have been able to resist its influence, but we think, nevertheless, a feeble infant might succumb. The physical development of the child of Marie Toulouse becomes a necessary element in determining this question. The infant appeared, according to the report of the experts, to be at full time and well developed, and we know that it weighed 2 kil. 400 (4 lb. 8oz.), and measured 48½ cen. in length (———). M. Casper admits that the mean weight of new-born infants is 3 kil. 500 (6½ lbs.), and M. Tardieu puts it at 3,000 to 5,000 grammes (5½ to 8). In a total of 4,104 children born at full time in Maternity Hospital, there were only 81 which exceeded 2,400 grammes, whilst the mean length varies between 46 and 50 cen. (19 inches). The child of Marie Toulouse had the normal length, but its weight was not proportioned to its length, and we may reasonably suppose there was a congenital feebleness which would favor death from cold.

"The child had lived; had respired freely. Nothing, however, in the examination authorizes the attributing the death to suffocation, since no traces of violence were present which would indicate attempts made with this object.

"If we do not attribute the death to the influence of cold and the absence of those cares necessary for the well-being of a tender infant, to what other cause can we attribute it? It is not very rare to observe rapid death in infants surrounded with all necessary attentions, and when autopsy is made, they are said to die from congenital weakness. This last hypothesis is applicable, perhaps, to the case under consideration, as congenital feebleness, aided by severe cold and want of care, would certainly conspire to make a rapid death. We present, therefore, from all these considerations, the following resumé of the opinions of the permanent committee of the Society of Legal Medicine, under the form of conclusions:

"1. The girl, Marie Toulouse, may have been ignorant of the commencement of her pregnancy; consequently would not know the exact time of her accouchement.

"2. She might misinterpret the nature of the pains she felt at the beginning of labor, and consequently have been rapidly delivered after placing herself on the night-vessel.

"3. A state of stupor or syncope might follow her accouchement, rendering her incapable momentarily of giving the infant the care it required; but it appears to us that this state must have been transient and of but short duration.

"4. The child of Marie Toulouse lived, and breathed after birth.

"5. No external or internal lesion gives any indication of death from violence.

"6. There is every reason to believe the death was not due to umbilical hemorrhage.

"7. In the absence of all characteristic lesion, it is natural to believe that death has been produced by a combination of the three following causes: *exposure to cold, want of care, and congenital feebleness.*"

Sentenced to two years' imprisonment, fined one hundred francs, and to pay cost of suit, for having, through imprudence, inattention, negligence, or design, caused the death of her child.

Primary Croup of the Nasal Mucous Membrane. [Jahrb. für Kinderk., 314, 1871.]—Schuller reports the following case, which had an unusual course: A boy five years old, nursed by a wet-nurse, of healthy parents, who had suffered from catarrh from his birth, was affected with dyspnœa and convulsive attacks. A floating croupous membrane was discovered in the left nasal cavity; no fever, no cause for diphtheria or coryza syphilitica to be found. The croupous membrane was removed, but returned in two days, and after this also had been removed a copious hemorrhage followed from the nose. Simultaneously there appeared, at the right under eyelid, a red spot the size of a hazel-nut, which disappeared the next day; when another appeared, with symptoms of fever, in the vicinity of the cheek-bones, which, during the following days, extended in all directions over the surface of the skin, with symptoms of dermatitis (erysipelas). The croupous process also extended through the nose to the throat. The child died in a convulsive attack.

Correspondence.

BOSTON, MASS., *June* 10, 1873.

The annual meeting of the councilors was held on the evening of the first day, for the selection of officers for the ensuing year, and to hear reports from the various standing committees.

In a former letter, I stated that the subject of admitting women to membership of the society, had been discussed by the councilors, and that the whole matter had been referred to the legal authorities, on the question, whether, under the existing by-laws of the society, women could be admitted. At this meeting of the councilors, a committee having the subject under consideration, reported that there was nothing in the rules of the society to prevent *female* doctors from becoming members, if they passed a satisfactory examination before the censors, and received their certificate. This report led to a long and heated discussion. Finally, a vote was passed, instructing the censors *not to admit women to an examination for membership* of the society. The vote passed with only fourteen majority, out of a vote of about eighty-two councilors. The friends of the gentler sex are hopeful for the future.

The second day's session opened with a very full attendance, with an evident feeling among the members that a very important matter was coming before the meeting. It will be recollected, that some time ago, a board of trial was convened for the purpose of trial of certain homeopathic practitioners, in view of their expulsion as members of the society. An injunction was served on the board, to stay proceedings, and the whole matter went to the Supreme Court. In due time, the court decided that the society had the right to discipline its members, and expel them if they violated its laws and regulations. A short time since, the board re-assembled, and summoned the parties against whom charges had been preferred to appear before that body. The trial commenced, and resulted in the recommendation of the board, that the homeopathics should be expelled from the society. It is interesting to notice the line of defense of those gentlemen, especially the acknowledgment that they are not confined to small doses but in certain cases. The report of the board of trial came up as the first business, on the second day of the session; and without any discussion, a vote of expulsion of the members who had been on trial, was carried with but one dissenting voice. Thus ends this matter for the present, although the expelled members talk of carrying the subject again to the courts, and to have an indignation meeting of the citizens of this faith.

The president announced that sixty-five new members had been admitted, and twenty-five had died during the society year.

The report of the treasurer, Dr. Francis Minot, was then made. It showed that the receipts had been $9,683.38, and the expenditures $9,400.74, leaving on hand a balance of $282.64. The property of the society amounts to $30,421.17, divided as follows: Shattuck fund, $9,166.87; Phillips fund, $10,000; general fund, $11,254.30. Credentials were presented from the visiting delegates, Drs. Gurdon Buck, of New York; M. W. Russell, of Concord, N. H.; Dr. Lincoln and F. E. Hitchcock, of Maine. Dr. B. Joy Jeffries made a personal explanation, denying the authorship of an article in relation to ether, published in Braithwaite's Retrospect and attributed to him.

The first paper of the day was read by Charles L. Price, M. D., of Natick. Its title was, "How shall we warm our Houses?" He attempted to show the cause of imperfect ventilation, and spoke of the evils resulting from it. He illustrated upon a blackboard an iron furnace and a system of ventilation which were free from the objections to almost every system in use.

Dr. Henry W. Williams, of Boston, gave a very instructive description of "The New Operation for Cataract."

Mr. A. Graham Bell, of Boston, late of Edinburgh, read a paper on the physiological aspects of the system of visible speech, invented by his father and applied in teaching deaf mutes to speak. He illustrated the system by the aid of a blackboard and two of his young pupils, a little boy six years old, and a little girl of the same age. He exhibited the different stages and the perfection of the system in its application, by several of his older pupils, who had been in training for a longer and shorter time. The exercise was quite long, but of uninterrupted interest. The system is now used in all the institutions to which Massachusetts pupils are sent, the Boston school, of which Mr. Bell is principal, being the first to adopt it.

THE ANNUAL DISCOURSE.

At one o'clock Charles E. Buckingham, M. D., of Boston, began the annual discourse. After a mild allusion to the homeopathic war, he briefly reviewed the history and objects of the society. It existed by an act of the commonwealth, not for money-making, but for the advancement of medical science, the health and good of the public, and its protection from quacks and tricksters. Its members were not bound down to any specific cure or mode of practice. They should receive instruction from any one whose opinions were entitled to respect. Discussion and research were duties which they sought to perform. They agreed in ignoring theories unsupported by facts, and were willing to listen to any one of experience whether they agreed with him or not. Medicine, he continued, was not the only curative power, and was it to-day proved useless the physician would still have enough to do, and, after stopping to class all those who pretended to cure by any one method, by Spiritualism, homeopathy, allopathy, or any other dogma, as mere quacks, he mentioned, as one of the many things to which the physician could turn his attention, the subject of mortality among infants. A consideration of this occupied the remainder of his remarks. He thought half the infant deaths was occasioned by disease of the digestive organs, caused by the substitution of artificial for natural nutriment. The carelessness of mothers in the dress of the children was also severely commented upon. The address, which occupied an hour, was quite interesting, unique, and full of common sense.

The thanks of the society were tendered to Dr. Buckingham.

THE DINNER.

At the close of the discourse the audience—members and guests—numbering about seven hundred, proceeded to Music Hall, where the annual dinner had been spread by J. B. Smith, caterer. Dr. Oscar C. DeWolf, the anniversary chairman, presided. Music was furnished by the Germania band. After the viands had been partaken of, the company was called to order by the chairman, who made a short address of welcome, after which the president, Dr. George C. Shattuck, was introduced to speak for the society. He referred to the unpleasant duty that had been performed in the expulsion of certain of their members, and bestowed great praise upon the board having the matter in charge. For Massachusetts, Governor Washburn responded in a eulogy of the medical profession. He spoke of the advance in medical science and its great results. President Eliot, of Harvard, responded for the Medical School as follows:

"Two years ago in this place the university asked the approbation and support of this old and vigorous society in an attempt to reform medical education. The university has had your cordial support; the revolution is two-thirds accomplished; and instead of hopes and promising plans, I can now bring you thanks and the assurance of complete success in a much shorter time than the friends of the undertaking had dared to hope. The Harvard scheme of medical instruction has commended itself to the reason and the experience of the whole medical profession. There has been but one voice, and that has been of approbation and encouragement. A few professors in other medical colleges have indeed declared with unfeigned sorrow their belief that the Harvard school must fail to secure the pecuniary success which its educational policy deserves. Some have thought that it would have been wiser to wait for a large endowment before attempting to improve the prevailing system of medical training. Gentlemen, that supposed necessity for pecuniary success is just what has brought American medical schools to their present disgraceful and appalling condition. The Harvard Medical School does not propose to be judged by that standard. There is not a place of liberal or professional instruction in the world worth preserving, which would consent to have its work and worth estimated by its annual balance-sheet. If the American medical school is to be a commercial speculation first, and a place of liberal training afterward, then the pecuniary argument is the fundamental one. Otherwise the profession may reasonably call upon the faculties of all medical schools in the first place to teach as well as they know how and upon that general plan which they declare commends itself to their deliberate judgment, leaving to the second place all question of pecuniary profit or loss. It must be observed also that all question of the money success of the Harvard plan would be at once set at rest if other medical schools ceased to offer cheap and easy access to the medical profession. As to waiting for an endowment, the faculty of our medical school thought that the first step afterward getting an endowment was to deserve one. As you might perhaps infer from what has been said that our experiment is not succeeding in a pecuniary sense, I beg to add that the corporation has been more than satisfied with the result so far, and, expects within two years to find the income of the school larger than it has ever been, and this for the very simple reason that under the new system one student for the whole course is as good as two under the old. The strength of the school as a place of teaching depends of course upon the quality and number of its teachers. I need not tell you, gentlemen, that the school has never had a stronger faculty than now, whether as regards numbers or professional eminence; they are thoroughly devoted to their work, and enthusiastically united in the determination to carry to a successful issue the reform which they planned and dared to undertake. This matter of medical education has deep interest, not only for the profession, but for the community at large. Being itself trained in and animated by the scientific spirit, the medical profession should be, and in good measure is, the daily household instructor of the community in scientific observation and scientific reasoning, its defender against unreason and superstition. We sometimes imagine that this generation has outgrown superstition, because, forsooth, we can predict eclipses, and know that certain plagues are preventible by human means, although, to be sure, we do not prevent them. Eight years ago I saw a scene one fair spring morning on a sweet hillside near the Hessian village of Marburg, which forcibly illustrated the jostling of science and superstition in modern society A murderer's head was cut off with a two-handed sword by the public executioner, in the sight of thousands of people. Instantly two professors of the neighboring university, with several of their students, rushed at the body to determine the continuance of the heart-beat and observe the sensitiveness of the head. Simultaneously an old peasant and his wife were allowed to lead their adult son onto the platform, that he might drink the warm blood from the healthy veins and so be cured of his epilepsy. A few years later I watched the streams of people going out on market day from the town of Lourdes in the Basses Pyrenees with bottles, kegs, and jugs to get the blessed water which flows to heal all diseases from the Virgin's grotto about a mile outside the town. I was at first inclined to a scornful pity of those poor French people,—victims of a superstitious delusion; but when I called to mind how many thousands of my countrymen and women take sugar pills with a like confidence, and how many millions more swallow nauseous and noxious powders, pills, and potions with an equally idolatrous faith in a universal specific, I came to the conclusion that the French pilgrims of

Lourdes, with their clean water, had much the best of it. The fact is, gentlemen, that ignorance, superstition, and idolatry are still all about us; and when we count the services of the medical profession to the community, we remember with thanfulness that it is not only a healing but a teaching profession—that it not only cures and prevents bodily diseases, but also enlightens and cleanses in its daily walk the dark and foul places in the mind of humanity."

Several other gentlemen responded to sentiment, thus keeping up the "flow of soul" till the waning hours of the day reminded the devotees of regular and legitimate physic, that the proceedings of this annual meeting had placed the Massachusetts Medical Society, already hoary with age, yet young and vigorous, upon a more substantial and firmer basis than it ever before enjoyed.

B.

Constipation in Children.—Dr. Alois Monti (*Wien. Med. Presse*) contributes an exhaustive paper on this subject. He thinks it due to the defective development of the muscular tissues of the intestines, and to the peculiar form of nourishment at this period. He sums up the various causes: 1. Mechanical impediment, as in congenital deformity, imperforate anus, invagination, hernia, etc. 2. Defective nourishment, as from congenital defects of the lip and throat, too little secretion of milk, etc. 3. Faulty nourishment, as from excess of caseine or defect of fatty matters in the milk, bringing up by hand, starchy food, etc. 4. Deficiency or diminution of the peristaltic movements of the intestines, atrophy, etc. 5. Diminution of the intestinal secretion, as in long-continued diseases in consequence of anæmia. Constipation is further a symptom of diseases of the brain and spinal cord; also a consequence of deficiency of drinks, of the use of astringents, presence of ascorides, fruit stones, etc.; and in other children it arises in consequence of deficient bodily exercise. The cause suggests the remedy—cod-liver oil and enemata of cold water, mineral waters, manna, etc.—*American Practitioner.*

Selections.

Professor "Monro, Tertius."—A writer in *All the Year Round*, quoted in *Every Saturday*, says :—

Professor Monro was, I need hardly tell any one acquainted in the slightest with the history of Scottish science, the professor of anatomy in the university, and the third of that name who had filled the chair for one hundred and twenty years. They are well remembered as the Monros—Primus, Secundus, and Tertius—and bear the relationship to each other of grandfather, father, and son. The first of the name was the founder of the Edinburgh School of Medicine, and one of the most distinguished men of his day. The second was also an able and eminent man; while the third, the one to whom we will more particularly refer, was—well, not a very distinguished man in any way. Nevertheless, in due course, as if by right of birth, he succeeded his father in the very lucrative post of professor of anatomy in the then famous medical faculty of the University of Edinburgh. I say by right of birth; for if it was not by that right, he had no other claim to fill the chair. He was not naturally a man deficient in ability, but was so insufferably careless that soon he really forgot the elements of the subject he had to teach. The students were not long in learning this too, and accordingly sought their anatomical instruction elsewhere. Dr. Knox and others were what are called extra-academical lecturers. Their lectures qualified for all examining boards except the University of Edinburgh, which did not recognize them; and accordingly the students were compelled to attend the university professors for their certificate, while they went to Knox and others to get their knowledge. Nowadays these extra-academical lecturers are recognized by the university; are under the same laws as the university professors; and, with some restrictions, their lectures qualify for degrees in medicine. They, however, lecture at the same hour as the university professors. Knox, however, lectured at a different hour from Monro, namely, exactly five minutes after the conclusion of the professor's lecture. Accordingly, the students trooped over from Monro to Knox, greatly to the annoyance, but in no way to the loss of the former. It may be well supposed that during their enforced attendance on Monro's lectures, they did not spend much time in listening to what he had to say. In fact, they used to amuse themselves during the hour of his lecture, and always used to organize some great field-days during the session. So lazy was Monro that he was in the habit of using his grandfather's lectures, written more than one hundred years before. They were, as was the fashion then, written in Latin; but his grandson gave a free translation as he proceeded, without, however, taking the trouble to alter the dates. Accordingly, in 1820 or 1830, students used to be electrified to hear him slowly drawling out, "When I was in Padua in 1694." This was the signal for the fun to begin. On the occasion when this famous speech was known to be due, the room was always full; and no sooner was it uttered than there descended showers of peas on the head of the devoted professor, who, to the end of his life, could never understand what it was all about.

Another jubilee was when he was describing the structure of the calf of the leg. "Here are two muscles, called the semimembranosus and semitendinosus, lying one over the other,"—but which was which, the learned professor, for the life of him, could never remember. Regularly every year, as the time came, his assistant "ground him up" on the subject. Chalk marks and private notches were put upon them, but all in vain. As he came to the ticklish point all fled out of his head; and while the theater was silent to await the coming fun, he would cast anxious glances at the demonstrator, but to no effect. Then, in desperation, he would push his porcupine quill beneath them, and blandly remark, "Gentlemen, these are the semimembranosus and semitendinosus muscles!" Then followed gallons of peas, and the lecture was at an end for that day.

Sometimes, Monro would request a student to take notes. Next day the student would be seen sitting most gravely in the front bench, under the nose of the professor, with a ledger for his notebook, a blacking bottle for an inkstand, and seven or eight quill pens, one stuck on the end of another, until they reached to about a yard in length. No wonder that Monro Tertius' lectures are now recalled by gray-haired old physicians as the most amusing part of their whole medical studies in Edinburgh. Finally, the university induced him to resign on favorable terms (to himself); and ever since the chair has been filled by men of eminence commensurate with its importance. He is now long ago dead; but occasionally curious students of biography will disinter from the now rare "University Magna" some most amusing verses descriptive of his peculiarities, by a student who in after-days became very famous—Edwin Forbes, late professor of natural history in the university.

What has been accomplished.—The annual meeting of the American Medical Association being over, and the report of its proceedings made public, the question may be pertinently asked, What did it accomplish? Our conviction is that upon a comparison of the expenditure and the result, the latter must be admitted to be lamentably small.

We may assume that there was an attendance equivalent to that of four hundred physicians for three days; which would be twelve hundred professional days devoted to the meeting, not counting the time spent by many of the delegates in traveling from their homes to St. Louis and back again. Let us now see whether any object or objects were attained, to the accomplishment of which any one physician would be willing to give up three and one-third years of his time. It seems to us that this is a fair way to put the case.

Of business relating to the affairs of the association itself, the main item was the establishment of the Judicial Council. That this is a step in advance, will probably be conceded by every one; but we submit that it is but a very short step, since it only provides for the entertainment of ethical and judicial questions, and does not touch the great difficulty,—the non-representative character of the membership of the association. Of some other matters—the reports of the committee on ethics, the report on American medical literature, and that on medical education—we have as yet only meager accounts; but those contain no salient points offering evidence of interesting material in them.

The Army Medical Corps made an appeal for the memorialization of Congress in their behalf, which seems to have been favorably received; but no action is recorded beyond placing the matter in the hands of a committee.

In regard to the nomenclature of diseases, a subject of great importance to the profession at large, no advance seems to have been made. Much committee-work has been done, and, we believe, done well; but the association needs to be more "in hand" to make it available by their general action.

One or two propositions were made looking to the establishment of a National Sanitary Bureau; a step which we think in such a country as this would be a great mistake. Far better would it be to leave these matters to the care of the medical men in the various states and regions, to be subjects of study and of competition on the part of those whose interests and opportunities would give them at once the stimulus and the capacity to deal with them.

Assuredly it seems as if this would be but a meager showing, were it all that one man of average ability could produce in three years of labor. Let us not ignore the social advantage of the friendly meeting of men from different cities and states, or the benefits that individuals may have derived from such contact with their fellows. What we urge, and what we hope to see recognized at some future day, is, that the business of the association must be more positive and practical, more business-like, and transacted by, we repeat (and we may have to repeat many times), a body more truly representing the great mass of active practitioners throughout the United States; not by a mere congress of those whose leisure and inclination happened to make it convenient for them to attend the meeting.—*Medical Times.*

A Benefactor of his Race.—We have spoken of the munificent endowment of the Hopkins Hospital, at Baltimore. J. C. Carpenter gives, in Appleton's *Journal*, a brief sketch of Mr. Hopkins, as follows:—

John Hopkins is now seventy-eight years of age, a Quaker, plain in his dress, looking as he walks the streets more like a poor clerk on a salary of seven hundred dollars than a millionaire; of medium height and size, homely in feature, with the wrinkles and puckers of long devotion to business; strict in all that relates to money, but not incapable of kindly actions—especially, it is said, to young men just entering the troubled and precarious arena of mercantile life. In addition to his country-seat at Clifton, he has a dwelling near the center of the city, an old-fashioned, double, two-story brick house, situated on elevated ground at the head of Liberty street, and having in front of it a solitary horse-chestnut tree. Here he lives when in town, essentially a solitary man, with no very near ties of kindred. In the day no signs are visible about the place; and at night it is but seldom that even a light is seen in any of the windows facing the street.

The following is a summary of his principal benefactions:

1. A University at Clifton, with Law, Medical, Classical, and Agricultural schools; endowed with probably three million dollars. The valuable grounds upon which this is to stand have been deeded to trustees, but the plan in its fullness will not be carried out until after the death of Mr. Hopkins.

2. A free hospital for four hundred patients, complete in all its appointments and departments, for the reception and treatment of the indigent sick of Baltimore and its vicinities; and, in special cases of casualty, for people of the State generally, without respect to age, sex, or color.

3. A convalescent hospital, in a country neighborhood, within easy reach of the city, to which patients from the free hospital may be removed as soon as relieved of their maladies, and where they may completely recruit their strength and vigor before returning to their customary labors.

4. An inclosure of the thirteen acres of the hospital as in part a free park to all who choose to enter it. A low stone wall will surround it, surmounted by iron railings; and the grounds are to be graded, laid off into walks, and ornamented with trees and shrubs and parterres of flowers, with seats for rest, and sparkling fountains.

5. In connection with the hospital a training school for nurses will be established, in accordance with the plans of that noblest of English women, Florence Nightingale. Such nurses are to be paid out of the trust-funds, and will be permitted, after becoming skilled in their duties, to exercise their profession wherever their services may be engaged among the general community.

6. A home for colored orphans and for colored children having but one parent, and, in exceptional cases, for such colored children, not orphans, as may be in need of charity. This home is to be in the country, and is designed to accommodate about four hundred inmates, and to be enlarged when necessary.

The hospital will form a part of the medical school of the University at Clifton.

Advertising Specialties.—A wide distinction should be made between the requirements of the code of ethics and a mere resolution passed at one session of the American Medical Association, often to be revoked at the next. In 1859, this association declared it to be wrong for specialists to advertise even in medical journals;

it being held that specialists should direct the attention of the profession to their merits by writing for medical journals, and by the discharge at home of their professional duties. This journal, after the adjournment of that session of the American Medical Association in May, 1869, rejected the offers of all advertisements from medical specialists, and discontinued all such advertisements then current in the advertising sheets of the work. Since the period named, no one has ever seen the advertisement of a specialist in its pages. After long experience and close observation, it is believed that this ruling of the association in 1869 (by an unimportant vote, and after very insignificant and impotent discussion), should carry no weight with the profession. The untenability of such a decision is patent to all, and while the decisions of this association should, as a rule, be respected, untenable decisions from this body, or from any other, should be repudiated. Some of the best specialists are unable to write; some have not time for writing; some are unwilling to write; some are too infirm to write; the result is that very few write. As a rule, many, by general consent, advertise in connection with colleges and through charitable institutions, in pamphlets, by cards, and by signs, the identical facts which the association declares it to be wrong to advertise in the advertising pages of a journal.

In addition to these facts, specialists connected with hospitals for the treatment of mental diseases, for the treatment of inebriety, nervous diseases, etc., advertise freely in medical journals, and they are sustained by the voice and influence of the profession. Can any sane man, with such demonstrable facts, give any sensible reason for refusing to specialists treating disease of the chest, the throat, the eye, the ear, the spine, the foot, etc., similar and equal advantages?

Several medical societies have decided against such fairness, liberality, and equity, even going so far (some of them) as to declare it against the code of ethics for specialists to advertise in medical journals; or for them to use any title not sanctioned or authorized by medical colleges. It is needless to say that there is nothing in the code of ethics justifying or sustaining such legislation. It was "resolved" in May, 1869, by the American Medical Association, that such advertising was unethical, but it was "resolved" on the same day that the minimum fee of medical colleges should be $120. Some of the most noisy and troublesome traducers who condemn the advertising of specialists in medical journals, because such advertising is contrary to what was "resolved" by the association in May, 1869, are teachers or attaches in medical colleges which charge fees less than one-half of the sum which the association, on that same day, "resolved" should be charged. The absurdity here is too patent to need further exposure. It may be thus summed up. If it be ruled as illegal for specialists to advertise in medical journals, it must manifestly be equally illegal for those connected with low-fee medical colleges to be allowed a seat in the American Medical Association; both are equally transgressors of contemporaneous law. As those violating the resolutions in regard to college fees, so far from being held as culprits, are honored with the highest offices of the American Medical Association, it is not only stupid and unjust, but a transparent absurdity, to hold as censurable those who propose to make public their specialties through medical journals. It is time to terminate this farce. It is not pretended, of course, that the unpunished violation of law by one party should give license in the violation of law by another party; but it is pretended and distinctly claimed that the great body of the profession will be just and fair in this matter; and that, as the real tribunal before which this issue must be and will be tried, it will not tolerate or sanction that species of legislation on the part of medical societies, in virtue of which violators of one portion of the "resolutions" of the American Medical Association are to be rewarded with the highest offices in the gift of that association, while others violating another part of the "resolutions" of this body are to be punished and made the targets for defamation, unequal legislation, and petty detraction. The great body of the profession will not only sustain the medical press in insisting, in this connection, upon equal justice and fair dealing, but it will also sustain, most surely, the medical press in according to specialists in diseases of the chest, eye, ear, throat, spine, foot, etc., the same privileges of advertising in medical journals that are so universally accorded to specialists treating mental diseases, nervous diseases, inebriety, diseases incident to alcoholism, etc.

It is time that medical journalists should do ample justice in this connection. No journal of good character will, from motives of pecuniary gain, go counter to the highest principles of right and equity; but no journal of any character, when these principles of justice and right are apparent, needing vindication and support, should fail to give these, though such a course may entail upon it injurious misconstruction, or even fatal censure. A journal that is conveniently and profitably silent, or a journal that is not as ready to condemn folly and wrong as to sustain wisdom and right, —when these are apparent in medical legislation, medical practice or medical action—is wholly devoid of independence, and deserves not only the censure, but the absolute repudiation of its supporters. Of course, where medical journals are owned by wealthy and cautious publishing houses, and where the editors of these journals are often mere purchased figure-heads (like the figure-head of a ship), to give ornament, and not guidance to the works with which they are connected, it is not to be expected that unwise or foolish medical legislation will be censured or condemned. It is not to be expected either that those meretricious journals whose editors, in their opinions, are bought and sold like sheep in the shambles, should condemn medical legislation; but it is time that the independent journals of this country should render even-handed justice to the educated specialists of their profession. After long reflection and ample experience, such will be the course of this journal.—*Richmond and Louisville Medical Journal.*

A Case of Spontaneous Umbilical Hemorrhage in the Newly-born. By S. Henry Dessau, M. D.—According to the recent authority of Dr. Ludwig Grandidier, of Cassel, spontaneous umbilical hemorrhage of the newly-born is an accident of such rare occurrence as to warrant a physician in recording such cases as occur in his practice, for the benefit of scientific investigators into this, as yet, undetermined subject. The great rarity of the accident may be inferred from the fact that, according to Dr. Grandidier, only two cases were seen by Drs. Hooker and Pearing, in America, out of 6,889 births, and only one case was seen by Roger, in the Foundling Hospital at Paris, out of 10,000 newly-born children. I therefore add a case more to the number already recorded, which, under the diligent and searching labor of Dr. Grandidier, have amounted to 220 cases, compiled from various American, French, English, and German authorities.

James L—— was born at about two o'clock in the morning, October 3, 1872, after an easy and natural labor of six hours' duration. The mother was a bright mulatto, at the date of confinement in good health, and had previously borne one child, which was living, and, with the exception of being bow-legged, was healthy. The father was a dark-colored negro, of intemperate habits, having a congenital deformity of the left hand, but otherwise healthy. The child, after birth, appeared perfectly healthy, was well nourished, and weighed seven pounds. Nothing unusual was noticed during the ten days that I attended the mother after delivery, the cord falling off on the fifth or sixth day, and leaving a perfectly healed navel.

On the afternoon of the fifteenth day I was called to see the child, and was told that it had been steadily bleeding from the umbilicus since the early part of the afternoon of the day before, a period of about twenty-six hours. The cause of the hemorrhage assigned by an intelligent white lady, living in the house, was a severe fit of crying, said to have been due to hunger on the part of the child, and inattention on the part of the mother. I found the flannel binder around the body of the child saturated with blood, and other portions of its clothing containing large blood stains, altogether showing that the child had lost a fatal quantity of the vitalizing fluid. The child was almost exsanguinated, and uttered a very feeble cry. On examination of the source of the hemorrhage, I found it located in the center of the umbilical protuberance, from which dark, venous-colored blood freely oozed. The blood did not coagulate.

As the hemorrhage was still very free, and serious results were to be apprehended from its further continuance, I passed two steel pins through the base of the umbilical protuberance, at right angles to each other, and applied a ligature, wound several times around, beneath the pins. This checked the bleeding most successfully, notwithstanding which the child died ten hours after, apparently from exhaustion.

Grandidier has collected four cases of spontaneous umbilical hemorrhage occurring on the fourteenth day, and twelve cases occurring at later periods, up to the fifty-sixth day after birth.* The recoveries in this accident of infancy were seventeen per cent. in 220 cases.†

As regards the cause of the hemorrhage in the case that I have given, the washing away of the clot in the umbilical vein, by the straining exertions of the child during the fit of crying, is, to my mind, the only solution of the question. A case occurring from the same cause is recorded amongst Grandidier's cases.

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*Die Freiwilligen Nabelblutungen der Neugeborenen, Cassel, 1871.

†Grandidier, loc. cit.

The method which I used for checking the hemorrhage, commonly called the Dubois method, is recommended by Grandidier only as a *dernier ressort.* He prefers using a graduated compress applied to the umbilicus over a pledget of lint saturated in the liq. ferri sesquichlor., and bound tightly around the abdomen.

Shall we have Another American Medical Association?—The present meeting of the American Medical Association in St. Louis invests the question of the practicability of reorganizing that body with much interest. For several years past there has been a feeling that this organization is very far from representing the profession of America, so far indeed that with few exceptions there is hardly a medical man in the country who is not thoroughly disgusted with its workings and heartily ashamed of the reputation it has earned. At one time, to speak against any policy of the association, or to criticise its doings, or to question its motives, was considered so heretical that it required all the moral courage which a firm conviction of being in the right gave to the critic. When we first took occasion to refer to its proceedings as being farcical, undignified, and unworthy of the high aims of a body claiming to guard the best interests of our brotherhood, we recollect how much righteous indignation was uttered against us. Now, however, as the question has been taken up and discussed by many of the leading medical journals, all of whom agree that the association as such has proved itself a failure, we feel that we have not written in vain; that we did not take the weaker side of this argument. We are now convinced that the time has come when the profession throughout the land are ready to entertain the question of a thorough reorganization of the society, and are willing to make an effort to give it that power and usefulness which should rightly belong to it. Many have gone so far as to give up all hopes of resuscitating it, and to propose a new organization in its stead. Although we believe that many radical and sweeping changes are necessary, we are willing to try the effect of restoratives a little while longer, believing that by this method there may be left a chance of lifting this so-called representative body from the disgraceful lethargy into which it has fallen.

We have always maintained that one of the great drawbacks to the association has been the cheapness of its delegateship. So cheap has it of late become that it goes a-begging. It has not been a question whether or not any one could go, but whether they would go. The consequence has been that very few of the solid representative men ever attend any of the meetings, and the important questions which may come up, and which have such an immense influence upon the good name of medicine, are left to be decided by incompetent upstarts and irresponsible bunglers. As we have so often said before, let there be fewer delegates; let there be the most stringent rules providing for their election, and let it be considered an honor to be elected. The suggestions of Dr. Prout, of Brooklyn, which we publish in another column, are deserving of consideration in this connection. We commend them to the attention of all interested in the question of creditable delegateship. Although his method is far from being perfect, it presents many striking points of practicability. We can at least seize upon it as a starting-point. We care not how the question of delegateship is settled, provided that we attain the results so anxiously, so imperatively desired.

We have also shown on previous occasions why newspaper reporters should be excluded, and why the suggestion of Dr. Davis, of Chicago, that the association print its own proceedings, is a good one. (Medical Record, vol. 8, p. 85.) We trust that the association may act accordingly.

Another point to which we wish to call attention, and one which it is of the greatest importance to consider, is the necessity of having a large and carefully selected committee of ethics. Every year we have one or more test questions sprung upon the association. As a rule, only a few interested parties are prepared to discuss them, and we have an exhibition of the disgraceful scenes which have of late made the association famous as an undignified, quarrelsome, and stultified body. Now, if all doubtful points, all important ethical questions, could be left entirely to this committee, composed, as it should be, of our best men—men whose opinion the whole profession respect,—they could, in a majority of instances, be disposed of at once. If this committee can not be unanimous in the expression of their views, let them make a majority and minority report, so that the association can see the true issues at stake, and be prepared to vote accordingly. This, it strikes us, is one way to insure that careful, impartial, and thorough examination into all "the weightier matters of the law," which their great importance to the present and future welfare of the profession demands.

Among all who have written on the subject during the past few months, no one has come so near to our own views as Dr. Gross, of Philadelphia. In a letter to the *Medical Times* (April 5) he submits a plan of reorganization that is substantially a modification of the plan we propose. Dr. Gross, who is one of the oldest members of the association, and who has given, as he states, "anxious deliberation" to the subject, accords with us in these three propositions:

1. That the association must reorganize or disband. 2. That ethical questions and miscellaneous business of all kinds should, so far as possible, be kept out of the public meetings of the association. 3. That the membership should be somewhat restricted.

In regard to the details of the method of correcting these two evils we differ, but our general objects are the same, and the plans are not so far apart that they can not be harmonized. Dr. Gross proposes the appointment of a medical council of ten members, residing at or near the place of meeting, to whom shall be referred all questions of ethics and other miscellaneous business, and their decision shall be final. We agree with this proposition, but the number of members of the council is too small.

A council sufficiently large, and composed of representatives from all parts of the country, would represent the profession of the *whole* country. They could meet a day or two before the association meets, hold private meetings daily during the session, and on the last day, perhaps, bring in their reports. It is not probable that all the members of a council thus constituted would ever meet; but out of thirty or more members there would be at least a majority. Dr. Gross must himself see that a body of ten men in St. Louis are not competent to decide the destinies of an association composed of physicians from all parts of the country. There is no necessity for quarterly meetings, as he suggests. Let them correspond by circular during the year, and when they come together their labors will be comparatively easy.

On this subject we are not theorizing. The plan we propose is a practical one. It has been and is carried out in many of our smaller societies, and with success, and this made their sessions most satisfactory. Dr. Gross further proposes to have the association admit members only through the state societies. We believe that it would be more practicable and every way better to allow the county and other societies to send delegates as heretofore, excluding medical colleges, hospitals, and charitable institutions of every kind. The advantage of this arrangement would be that the county and other societies, which are really of greater importance to the well-being of the profession than large organizations like the American Medical Association or state societies, will be better sustained, and the members will labor in them and for them, in order that they may deserve and receive the honor of delegateship.

As an experiment, the transactions have proved a failure, not only in a scientific, but in a pecuniary way; and unless we can make some change for the better in both respects, we are in favor of confining their utility to the mere publication of the minutes, leaving the valuable papers to be disposed of as promptly as possible in the different medical journals of the country. By such means authors can come before large audiences, and their ideas can become the property of the profession at least within the year in which the pretentious and expensive volume of transactions is expected.

We do not, however, pretend to speak of all the changes necessary to be made in the organization of the association to place it in the position which it should hold, but only desire to call attention at this time to one or two which, it strikes us, are of sufficient importance to engage the attention of the association at its next meeting. Doubtless other suggestions equally good will be advanced by others; and if they are considered more practical, more comprehensive, and more salutary in their general influence upon the profession, we hope that they will receive every consideration. We are not ambitious to see any particular theories of our own adopted, our sole aim in entering the discussion being to redeem the association and cause it to reflect the sentiments of the advanced professional mind of the present. Let us make a determined and conscientious effort to bring about such a result, and if this be impossible, we are then willing to accept the ultimatum of the demise of the association, and at the same time congratulate the profession that it has freed itself from an incubus which has been weighing down its very life for the past ten years.

In conclusion, let us hope that the meeting at St. Louis will be signalized by the incorporation of all the changes in the organization which shall insure for it the countenance and respect of the entire American profession. We believe that the fate of the association hangs on the meeting at St. Louis. Will its founders and friends be equal to the emergency?—*Medical Record.*

Cincho-Quinine.—In answer to several inquiries concerning the nature and uses of this comparatively new alkaloid, which seems just now to be exciting marked attention in the profession, we republish from the Boston *Journal of Chemistry* for June, 1869, the following account of the salt. As the season of the year is approaching when the products of the bark will be in great request, we should be pleased to have from such of our readers as use the chincho-quinine a report of their experience with it, especially as compared with the sulphate of quinia. There seems good reason for believing it to be a very valuable addition to the list of antiperiodics.

"Acting upon the idea that the natural alkaloidal principles of bark in their simple, unchanged condition, separated from the gross, woody, and other matters, would better subserve all therapeutical ends than the barks themselves, or *any one* of the alkaloids separately employed, cincho-quinine has been prepared.

"Cincho-quinine contains no external agents, as sugar, licorice, starch, magnesia, etc. *It is wholly composed of the bark alkaloids:* first, quinia; second, cinchonia; third, quinidia; fourth, cinchonidia; fifth, other alkaloidal principles present in barks, which have not been distinctly isolated, and the precise natures of which are not well understood. In the beautiful white amorphous scales of cincho-quinine, the whole of the active febrifuge and tonic principles of the chinconia barks are secured, without the inert, bulky lignin, gum, etc. It is believed to have these advantages over sulphate of quinine:

"1. It exerts the full therapeutic influence of sulphate of quinine, in the same doses, without oppressing the stomach or creating nausea. It does not produce cerebral distress, as sulphate of quinine is apt to do; and in the large number of cases in which it has been tried, it has been found to produce much less constitutional disturbance.

"2. *It has the great advantage of being nearly tasteless.* The bitter is very slight, and not unpleasant to the most sensitive, delicate woman or child.

"3. It is less costly than sulphate of quinine. Like the sulphate of quinine, the price will fluctuate with the rise and fall of barks, but it will always be less than the lowest market price of that salt.

"4. It meets indications not met by that salt."

Yokohama, Japan, May 7, 1873.—I am a doctor from a town in the State of New York. It is said that if a doctor gets through the first ten years, he will live to a good old age. I had practiced eight years. I found that rheumatism and asthma were getting hold of me with a close embrace. I had to go six miles on horseback, at night, in the rain, to see an old sick darky, a pauper, and I did not get a cent for it. I concluded that if I did not get out of that, I should soon peg out.

I started without any particular object in view, other than getting rid of the rheumatism and asthma, as well as the annoyance and responsibility of private practice. Out here I find, to me, a new world and a new people. The first thing I did was to get a Japanese and English phrase-book, and bone up on it. I own a ginrickshaw (a two-wheeled carriage, of infantile proportions, universally used here), and two bettoes (tattooed men). One man is enough on level ground, but up hill it is necessary to have one man to pull and another to push. When I go to the great idol Daibutz, twenty miles, my men deliberately strip themselves for the journey, except a breech-cloth, about six inches wide; and even the breech-cloth they do not hesitate to take off at the various tea-houses, in order to dash water over the privates. They do not hesitate to do this even in the presence of the ladies, merely taking the precaution to turn their backs.

The *naiveté* of Japanese ladies is astonishing. I summoned my best effort in the native language, at Totska, and asked one of them how old she was. She replied that she was not allowed to have sexual intercourse until she should be twenty! I like Japanese houses; I have no further use for chairs and tables, having become convinced that these last are a vice incident to our civilization. I take off my shoes when I enter the house, I stretch myself at full length on the soft grass mats, I eat my rice and chicken from dishes set on these mats. I am sure to have two or three Japanese ladies near me, assisting or resting. I would like to send you a sketch of a Japanese resting; it is a curious sight. [A pencil sketch is inclosed.] I sleep on the mats. The only thing which I can not as yet get accustomed to is the triangular wedge of wood, slightly padded at the top, and placed under the nape of the neck, for a pillow. I have tried it several times, but uniformly get cramped.

I have assisted, as the French say, several times, at Kamakura, in the worship of a rock, some ten feet square, which the Japanese say fell down from heaven. On it is a very correct representation of the clitoris, labiæ, mons veneris, and vaginal orifice, of colossal dimensions. Worship of this stone is reputed to have cured tens of thousands of barren women who have visited it from all parts of the Empire of Japan.

Sterility would seem to be more common among the males here. I have repeatedly seen a penis, say four feet in length, occupying a secluded place in the temples at Yeddo, Odawana, and Myanoshta.

I would advise those of my medical brethren who intend visiting Japan to come quickly, for the Japs are rapidly emerging into the light of our so-called blessings of modern civilization. For my own part, I am delighted with this beautiful park, covering the whole island of Niphon, and with the people who live back from the open ports in a state of charming Arcadian simplicity. I would like to tell you of some bath-house scenes I have witnessed, but I forbear. I will remark, *en passant*, that the people keep themselves clean.

I thought I would put down these notes for the *Reporter*, but I doubt whether your readers would like any more of them from an already retired physician, whose sands of life have not run out. *Sayo nara.*—F. R. BROWN, M. D., *to the Philadelphia Medical and Surgical Reporter.*

Quick.—They have rather a rapid way of living and dying in Memphis. Dr. Miller, of Atlanta, who was in Memphis while the cholera prevailed there, narrates a sprightly incident. At 7 o'clock a man went to market and bought his breakfast, went home, cooked it, and was eating it, when he was taken with cholera. He sent for Dr. Miller, who visited him at 9 o'clock, prescribed, and told him he would be back in an hour. At a quarter past 10 he returned. The man was not only dead, but had been buried, and the room swept and garnished for another occupant. What could Dr. Miller have given him?—*New York Tribune.*

Suicide of a Dentist.—Dr. Amos Westcott, a doctor of dental surgery, committed suicide at his residence in Syracuse, New York, July 6, by shooting himself. He had been for two or three years suffering from hypochondria, which neither extensive travel nor medical treatment could cure. Deceased stood confessedly at the head of the dental profession. He was formerly Professor of Operative and Mechanical Dentistry in Baltimore College of Dental Surgery, and subsequently professor in the New York College of Dental Surgery. He did more than any other to reduce dentistry to a science and profession. He was the author of several works on dentistry, and was the originator and first President of the State Dental Society, and was at the head of the National Dental Society. In 1860 he was Mayor of Syracuse, and at his death was fifty-nine years of age.—*Medical and Surgical Reporter.*

Making Mistakes.—If Liebig was hasty in expressing an opinion, he was equally ready to retract when convinced that it was erroneous. I once had a conversation with him on this point, and he spoke of the fear some scientific men had of being caught in a mistake. He considered errors inevitable and inseparable from the accomplishment of any scientific work; and it was on this occasion that he made the oft-quoted remark, "Show me the man who makes no mistakes, and I will prove to you that he does nothing." It is easy enough for a scientific man who publishes nothing, but only criticises others, to escape the charge of committing errors, and for such persons Liebig entertained a wholesome contempt. What he desired, above all things, to know, was the truth; and when he thought he had discovered it, he was anxious to give the benefit of it to the world.—*Journal of Applied Chemistry.*

The Cholera in Europe.—Reports from Dantzic state that on June 19, twenty-seven cases of cholera occurring among Polish boatmen had been received into the hospitals at Naufahr and Strohdalch, of which nineteen had died. The disease has reappeared in Warsaw, where, from May 30 to June 12, there were nineteen cases, of which four were fatal. Eight cases, of which five died, occurred in the neighborhood of Thorn on June 13 and 14. In Moravia, where no cases of cholera had occurred after March 23, the disease broke out on May 31 in a place in the District of Znaim. Six persons were attacked, of whom five died. In Galicia, during the second half of May, 118 new cases of cholera occurred in seven districts, with a population of 13,084. Including 48 remaining under treatment, there were in all 160 cases, of which 117 recovered, and 43 died.—*British Medical Journal.*

Sir James Paget on the Treatment of Bed-Sores.—First of all, look to the bed. Good bed-making is an indispensable thing in the prevention of bed-sores. Several beds have been made especially for this purpose, of which the best is Dr. Arnott's. It consists of a chest full of water; on the top of this is a water-proof sheet, and over this an ordinary sheet on which the patient is laid. Here the patient is absolutely floating on water. The water-proof sheet is not drawn tight, but adapts itself to every part of the patient. A patient might lie on this for years and never have a bed-sore. Inferior to this, but very good, is Hooper's bed. Here the water-proof on the bed is tight. They will avert bed-sores for a long time, but I should not like to say that a patient would never get a bed-sore on them. But you can not have these everywhere; you can 't take them about to every one who may need them, and there are many cases in which they can not be used at all, as in cases of fractured neck of femur, acute inflammation of knee-joint, and many others.

In ordinary beds the best thing is an ordinary firm mattress of horse-hair; and it must rest on boards. Cords are the worst possible things, as after twenty-four hours or so they give under the weight of the patient, and the most prominent parts are pressed upon. Iron gives after two or three weeks. Not so boards. It must be quite level. Under the horse-hair it is better, if possible, to have a spring or straw mattress. Feather beds and the like are, of course, to be utterly condemned. If possible, have two beds, so that you may lift the patient into the other when it wants making. You thus avoid making beds under him.

The next thing is to harden the skin. The best application for this is a solution of one part of nitrous ether in three of water. If the back is frequently washed with this, bed-sores may be completely averted. There is in the hospital a man paralyzed in his lower limbs; he has been in this state for ten months. By the good nursing of the sister of his ward, bed-sores have been kept away. This application of nitrous ether has been used. Solution of one grain of perchloride of mercury, with two drachms of nitrous ether, and six ounces of water, is another good thing. Whisky is used in Scotland, as is brandy sometimes in England; but these are not so good. In Germany they use a solution of tannic acid. When the parts look as if they were going to slough, these spirit applications may be too strong, and then a solution of gutta percha in chloroform is very useful. Next, we have to prevent pressure on those parts where bed-sores are likely to occur. These are, the middle line of the sacrum; after that, in thin persons, the posterior-superior spines of the ilium, and the sacro-iliac articulations; then the trochanters of the femur. The chief thing is a frequent change of posture. If a patient can lie in four different positions during the day, bed-sores may be prevented. He may lie on his back, each side, and on his face. Of course, you could n't make a stout person lie on his face: he would simply suffocate. This change prevents the gravitation of the blood. This may easily be seen by looking at the back of a subject in the post-mortem room. The back is quite red from this cause.

When patients lie on their backs, they may be saved for a time by dividing a mattress and leaving a space of six inches between the halves. You may thus save the sacrum, which will have no pressure on it. The case before referred to was treated so, but sores came on the ilium and trochanters.

Large cushions made of amadou in the shape of a horse-shoe are very good. Pads of cotton wool may also be used with advantage. In speaking of the mode of curing bed-sores already formed, let me remind you to continue your preventive treatment just as if there were none, lest they come in other parts.

During the sloughing there is nothing better than a poultice of equal parts of linseed and bread and enough charcoal to have a deodorizing effect. Carrot and turnip poultices are also deodorizing, but they are not so good as the first. The poultice is best spread on ordinary tow. When spread on linen, etc., folds are liable to form, and if the patient is on these they promote the bed-sore. When slough begins to separate, the resin or other stimulating ointment should be spread on the surface of the poultice.

When the slough has separated, the sore should be dressed with resin ointment or Peruvian balsam, or equal parts of these, in the following manner: little bits of cotton wool should be slightly spread with the ointment, and put into the sore until it is quite full. They thus make an equable soft surface for the sore. These are the chief local means for curing bed-sores. As regards internal treatment, do n't stimulate. Let the diet be gentle but good; plenty of milk and bread, little or no meat, and a small quantity of wine.—*The Student's Journal.*

Medicine for Children.—In prescribing for children, the proper dose of a medicine can not always be calculated according to the age of a child, and does not in all cases bear the same proportion to the quantity suitable for an adult. For certain drugs children show a remarkable tolerance, while to the action of others they show as remarkable a susceptibility. Thus, opium, it is well known, acts upon a child more powerfully than would be expected, judging from the mere difference of age. It should therefore be given to infants with a certain caution, especially if the child be enfeebled by disease. It is, however, a medicine which is of especial value in the treatment of the disease of infancy, and may be given without fear, if care be taken not to repeat the dose too frequently. Belladonna, on the contrary, can be taken by children in large quantities. A child of two or three years old will bear, without inconvenience, a dose which in an adult might produce very uncomfortable symptoms. Lobelia, again, is a remedy which is very well borne by children. Dr. Ringer has given it to "very young children" in doses of five minims every hour, and in no case has he noticed any ill effects to follow its administration. Arsenic should be given to children over five years of age in the same dose as that used to adults, and infants of a month or two old will take one drop of Fowler's solution, three times a day, with great benefit in cases of gastric catarrh. The influence of mercury upon young children deserves remark. It seldom, in them, produces stomatitis or salivation; but an excess of the drug is not therefore harmless; its influence is seen in the irritation of the alimentary canal which it so often excites, and in the profound anæmia which it induces. The anæmia which is so common a sequence of constitutional syphilis in infants is, no doubt, often a result of too long-continued mercurial treatment.—*Med. Times and Gazette.*—Dr. EUSTICE SMITH, *of London.*

An Improved Means of Plugging the Posterior Nares. By A. GODRICH, M. A., M. R. C. S.—The instrument consists of a small elastic bag, stretched on the end of a hollow style, by means of which it is pushed through the nasal fossa into the pharynx. It is then dilated with ice-cold water, by means of the ordinary ear-syringe, the nozzle of which is inserted into a piece of India-rubber tubing, tied to the other end of the style. A small piece of thread or twine tied round this prevents the water from escaping. The bag, thus dilated, is now to be drawn well forward into the posterior nares, into which, by its elasticity, it will accurately fit. The anterior India-rubber plug is next to be slid along the style (this is more easily done if the style be previously wetted) into the anterior nares, which it fits like a cork. The cohesion between this plug and the style will, I think, be sufficient to hold both plugs in position; if not, a piece of string tied round the style, in front of the anterior plug, will insure perfect security.

When it is necessary to remove the plug, all that the surgeon has to do is to cut the string tied round the piece of India-rubber tubing, when the water will be expelled by the elasticity of the bag, and the instrument may be removed without difficulty.—*British Medical Journal.*

A Valuable Gift to the Medical Department of the University of California.—J. L. Bardwell, Esq., of this city, has recently presented to the Medical Department of the University of California a valuable original painting (portrait) of Gabriele Fallopio, by Tintoretto. The picture has for some time past been on exhibition at the Art Union Association's rooms, and is considered by connoisseurs an exquisite work of art. Being an original, the inference is, that it is a likeness, and, as such, will doubtless be highly esteemed by the Regents and Faculty, not only as an acquisition to its museum, but as an indication of the interest which is already making itself manifest among our citizens in the welfare of our great central institution, the State University.

In this connection, we are authorized to say that, with a view to building up a museum that shall alike be a credit to the University and the State, that all contributions, whether of paintings or preparations, anatomical or pathological, are solicited, with the assurance that credit will be given in a proper manner to all contributors, whether they be professional or laymen.—*Western Lancet.*

Therapeutic Memoranda.—On the use of a Sponge-tent in Epistaxis. By D. S. Skinner, L. R. C. P., London, etc., Lynn Regis.—I immediately passed a large-sized carbolized sponge-tent into the nose, leaving only the string visible, to extract it. In a very short time the bleeding ceased; there was no recurrence of it during the night, and in the morning she extracted the tent herself, with the greatest ease, and there was no hemorrhage afterward. She complained of no inconvenience or disagreeableness whatever from the tent.—*British Medical Journal.*

The Connection between Laceration of the Perineum and Prolapsus Uteri. By ALEXANDER MILNE, M. D.—We associate these two articles together, as evidence of the entirely opposite views held by careful observers upon the action of the vagina, sustained by the perineum in giving support to the uterus; the former teaching that rupture of the perineum "is not a cause of prolapsus, or procidentia uteri;" that "the perineum has nothing to do with the maintenance of the uterus in its natural position," and that the only influence a rupture can have is to favor a more direct procidentia, in cases where the causes for the displacement are in action. Dr. Milne takes a directly opposite ground, maintaining "that the perineum, in its normal state, does aid in supporting the uterus, and, when lacerated, favors the descent of that organ," and "that rupture favors prolapsus uteri by destroying the curvature of the vaginal canal, and making it approach the perpendicular." Various arguments are adduced by each writer in proof of his own particular views and opinions, and the society appears to be very much divided upon the question—Drs. Keiller, Bell, James Young, and Cuthbert rather favoring the views of the former, and Drs. Ritchie, Gordon, Murray, and Bruce those of the latter.—*Transactions of the Edinburgh Obstetrical Society.*

Old Clothes.—The danger of standing in other men's shoes, or of wearing their cast-off habiliments, is sometimes overlooked. M. Chevallier relates, in the *Journal de Chimie Medicale*, January, 1873, that a young man of good family died in December last, because, instead of buying new gloves, he bought a pair of cleaned gloves. Either from the cleaning having left a poisonous substance inside the gloves, or from some venomous insect lodged there, he felt presently a sharp pain in an abrasion which he had on the thumb. He bore it for a while, but at the end of half an hour he was obliged to tear the gloves off. His hand was swollen, and the spot was black. Gangrene followed, and death. The story reminds one of some of the well-vouched histories of the effects of the bite of the juniper-fly in China, or of cases of the charbon or malignant pustule which are due to infection. M. Chevallier mentions another case, in which a second-hand pair of pantaloons conveyed skin-disease; and recent prosecutions for selling the clothes of small-pox patients suggest still more serious possibilities.—*British Medical Journal.*

Gratuitous Medical Advice.—Dr. Wardrop was in the habit for many years of giving advice to "poor people" at his house in Charles street, St. James' Square, and was induced to discontinue the practice from the following circumstances: He had been called out one morning early to a patient in the neighboring square. On returning home he saw, alighting from a coroneted carriage, a somewhat shabby old man whom he recognized as one of his gratuitous morning patients. He made a detour, and, returning, inquired of the footman the name of his master, whom he ascertained to be the Earl of ——. When his turn came, the pauper patient was ushered into the consulting room of the great surgeon. Wardrop, in his blunt and decisive style, addressed the impostor by his name. The surprise of the latter may be conceived. Wardrop, who kept notes of all his cases, ascertained that he had been defrauded of somewhat about twenty guineas. This sum he demanded, under a threat of exposure of the culprit, and was successful in obtaining it. We have heard Wardrop relate this anecdote, and describe in his graphic manner the miserable appearance that the old rogue presented. The circumstances detailed took so strong an effect upon Wardrop that he determined to discontinue a vicious system. Frauds of this description are so frequent since the establishment of proprietary special hospitals and dispensaries, that surgeons in general practice, particularly in the metropolis, are robbed of a large portion of their income.—*Med. Times and Gaz.*

Josh Billings on Doctors.—Doktors are not all quaks; yu hav got wrong noshuns about this. Doktors, lawyers, and ministers hav a hard row to ho; they hav to deal with the kredulity, knavery, and fears ov the people, three ov the most difficult traits in human natur tew handle.

If i was a doctor, and understood mi bizziness, i should dokter mi pashunts, and let the disease take care ov itself. More folks are kured this way than enny other. It ain't much trouble tew doktor sick folks, but tew doktor the well ones is bothersum.

Imperial Gratitude.—Sir William Gull was waited upon on the 20th of May by Dr. Conneau and Dr. Baron Corvisart, who presented him, on the part of the Empress Eugénie, with a costly gold box bearing the Imperial cipher in diamonds. The box contained a pair of sleeve-links worn by the late Emperor.

Editorial.

Cholera.—During the present spring and summer, cholera undoubtedly made its appearance in New Orleans and other large cities of the Southwest. Memphis, Nashville, and other points suffered severely. Gradually the disease appears traveling quite generally to all points of the Ohio and Mississippi Valleys. Early in June we commenced having scattered cases in this city; and, though some of the first cases were rapidly fatal, most of us were at first unwilling to admit the disease as true cholera. But with the wide-spread tendency to a choleraic epidemic, and the large number of cases of this character which have presented themselves amongst us, together with the fact that the type in all essential respects is true, there seems a general assent to the view expressed.

At no time, however, has the epidemic assumed a malignant character; the death rate has run about two or three a day—one or two days perhaps as high as six or eight. There are no new views among the physicians here as to treatment: most of the cases have been easily managed with the old plans; and now, while there are still a few scattered cases, we regard the visitation as essentially at an end.

In this connection we desire to express our compliments to Dr. Peters, of New York, who has visited Cincinnati and the important points in the Southwest. Dr. Peters believes that the choleraic trouble is true Asiatic cholera, imported by ship from Europe to New Orleans—transferred by communication, transmissible by contact. We accord to Dr. Peters enthusiasm, and all that sort of thing; but honestly, with all our study, we fail to observe the steady track of epidemic march. Then what? Why, probably that cholera has become in these fifty years a resident of the country—nevertheless it is cholera; and if the cholera of the Ganges is transferred to the Ohio Valley, and becomes a denizen, we must accept the situation. Still with this view the therapeutics does not essentially differ. It would seem as if cholera was a local matter, and that certain not well-understood circumstances were always liable to excite its invasion. Doubtless a transport from Odessa may be the nucleus for a fresh outbreak—at any rate, cholera pervades the Southwest, and is ready to attack all the villages of the valley; hence we trust our friends will be ready to meet the tiger of the Ganges, ever so much disguised.

In another place we record the death of a prominent young physician—Dr. C. P. Divan. While the ink is scarcely dry on the above, we have the death of Dr. Quick, at the Good Samaritan Hospital. In this connection we may say that doctors are among the most careless and improvident of people; they are constantly exposed, and constantly seem to avoid all reasonable precautions.

We quote the following from the Philadelphia *Medical Times:*

"Our readers, no doubt, will remember that we failed in our last issue to lay before them any information of much interest concerning the epidemic of cholera prevailing in the West. Owing to the kindness of our correspondent, Dr. Ramsey, of Knoxville, Tennessee, and to the arrival of some of our Western exchanges, we can to-day, in a measure, fill the gap in our last issue.

"About two months ago, cases of what bore a strong resemblance to malignant cholera, in symptoms and termination, were reported in New Orleans—it is said, shortly after the arrival of a vessel from Odessa, where the disease is prevailing. A steamer leaving New Orleans for Cincinnati lost a number of deck-hands or passengers on its way; and not long afterward cases of the disease made their appearance at Memphis, and at points on the river below.

"Following the lines of travel, the disease continued to spread, passing up the river to Paducah and Cincinnati, and along the railroads to Nashville, Gallatin, Murfreesboro', and finally into Eastern Tennessee. Nashville has, as in all previous epidemics, suffered very severely. On June 20, seventy-three deaths were reported there from cholera, and the daily mortality ranged from forty to seventy during the week from the 15th to the 22d. Probably, however, the little town of Greeneville, on the main line of railroad, in the extreme eastern part of Tennessee, has been the most severely punished of any place as yet—punished for the most reckless disregard of the first principles of sanitary science, if not of those of common decency.

"By death and fright the population is said to have been reduced in two weeks from twelve hundred to three hundred. By the 1st of July all business whatever had stopped, except a very limited traffic in food, and attention upon the sick and the burying of the dead.

"As almost all of the well-to-do had fled, and as no work was to be had, great destitution prevailed; and even famine might have been added to the miseries of the poor, had not the surrounding towns answered their cries for help. The cause of this great malignancy is not hard to discover, and is clearly shown in the following extract from Dr. F. A. Ramsey's official report to the mayor of Knoxville:

"'More than a quarter of a century ago, an immense pit was dug in the very center of the town, and a cloaca erected over it with capacity sufficient for the accommodation of the entire community during all these years. A very short time before the erupting of the disease by which the town has been depopulated, an *energetic* citizen ingeniously emptied this pit, and had the contents wagoned through the town and spread upon the face of a hill on the northwest verge of the corporation, the contents from the pit spreading over a very considerable surface of wet ground, exposed for several days to a fiery sun. Then there occurred the heaviest rain that any citizen of Greeneville had ever witnessed. It was the eastern side or slope of the hill on which the deposit was made, and of course the wash of the hill was into and through the town. The heavy wash of this rain carried all the surface soil from the hill, and, as the water covered an area equal to three-fourths of the corporate extent of the town, the *debris* from the pit which it held, fairly divided, if not dissolved, was distributed to just so much of the surface of the ground. But this is not all: the *pile* is yet incomplete! The town of Greeneville is a town of gardens, each garden-owner indulging an emulation as to who would have the best grapes—all the gardens having grape-arbors of less or very large extent. All the inhabitants of the town believed that the fæcal deposit made by men, women, and children is of all things the best to give vigor to the grape-vine, fullness to the grape, and luscious delicateness to the flavor, and mellowness to the odor of the juice of the fruit. Every cloaca in the town surrendered its contents, and at the root of each main stem was buried, in wet earth, a pile of human excrement. . . . In the overflow several wells were contaminated, the waters of which, of course, are poisonous now; but outside of the overflow there is no reason to believe the water of the town to be otherwise than pure. The cloacæ of the town are without pits, and are all built upon a natural or artificial drain or sewer, communicating with a creek that passes from a northwest point, running east and then south through and on the edge of the town, and soon entering and passing through farms more or less contiguous to the town. The stock on these farms drink the water of this stream from Greenville; and as far distant as five miles from town, on this stream, cases of the disease have occurred. In no instance of occurrence of the disease in Greene county has it been difficult to demonstrate a direct or indirect contact with Greeneville atmosphere and Greeneville water, contaminated by human fæcal matter."

Wherever the disease has prevailed, the colored population have suffered more than the white, largely, no doubt, because they through poverty frequent the more unhealthy neighborhoods and live in the greater squalor and filth.

Thus, in Nashville, on one day, forty-nine out of seventy-three deaths were of colored persons. Even when the mortality exceeded seventy a day, the city proper was comparatively healthy, the epidemic prevailing in the low bottoms along the river.

A very singular attempt has been made by some of the most talented physicians of the infected localities to disprove that the disease was Asiatic cholera, and it has been over and over affirmed that it was simply "sporadic cholera." As to the term "Asiatic," we do not stickle for that; call it Mississippi cholera if you please; but we do insist that a disease which spreads over hundreds of country, which depopulates villages and strikes terror into cities, is *epidemic*. If it is simply sporadic, we want to know under what circumstances a disease is epidemic.

Again, we still hold to the belief that two diseases which are identical in mode of spreading, in symptoms, in results, or, in other words, diseases whose natural history is the same, are one and the same thing. The present epidemic has passed along routes of travel, has been propagated by water contaminated with fæcal matter, has attacked most freely those living in low and crowded portions of cities, has produced in its victims all the symptoms and results of true cholera, and is therefore, in our opinion, nothing else than cholera.

Tetanoid Affections.—We are under obligations to Dr. B. Roemer, of St. Louis, for a monograph on tetanus. It is based upon a series of cases which came under the author's treatment; mostly, as we notice, wounded soldiers in the late war. The tetanic features are briefly detailed, and the peculiar treatment and results, after which we find an exhaustive review of the literature of the subject. This review gives the result of remedies, as used by a large list of reporters, and is perhaps as comprehensive an outline of the therapeutics of the subject as can be found. Indeed, Dr. Roemer seems to have made almost, if not quite, an exhaustive study of the subject. The effects of chloroform, opium, curara, cold, electricity, bromide of potash, Calabar bean, etc., are given, with extended lists of cases. We have, theoretically, a great deal of faith that Calabar bean ought to relieve tetanus; and we still confess our surprise that Dr. Roemer has found so many cases of its use and results. Thus, he gives one group of eighteen cases treated with extract of Calabar bean, with ten recoveries. This is certainly a good result, and yet the Calabar bean has been used in this city faithfully, with fatal results. Thus, Dr. A. M. Brown had a fatal case, in which he gave ¼ gr. extract every hour, and gradually increasing up to ½ gr. and 2 grs. Dr. Jno. Davis reported a fatal case, in which the extract of Calabar bean was used, both internally and by hypodermic injection. Still, with so serious and intractable a malady, the statistics of Dr. Roemer are encouraging. Dr. Roemer very justly remarks that we are to use the same discretion in tetanoid as other diseases, and avoid a routine plan of therapeutics. Nevertheless, in a disease which has thus far proved so intractable, we are very apt to adopt empiric views of treatment. We thank Dr. R. for his monograph, and take this occasion to congratulate him for his industry.

Death of Dr. C. P. Divan.—Dr. Divan died of cholera, on the 28th of June. He was one of our rising young physicians, having passed the Rubicon of anxiety, and entered upon the days of success. He was a graduate of the Miami Medical College of this city. In various ways he had been recognized by his neighbors and friends, and his death will be sincerely lamented by many excellent families who had learned to trust in his skill.

Just as we write this paragraph, we regret to announce the death of Dr. Quick, from cholera. Dr. Quick was one of the resident physicians of the Good Samaritan Hospital.

The Southern University, at Greensboro, Alabama, has been in active operation for many years. In 1872 there was regularly established the Medical and Legal Departments of the University, and all these seem to be entering upon a career of satisfactory prosperity.

Female Doctors.—The *Pharmaceutical Journal* quotes the following couplet from the "Nugæ Canoræ Medicæ," where the poet-laureate of the Edinburgh New Town *Dispensary* predicts:

"An' when the leddies get degrees,
Depen' upon 't there 's nocht 'll please
Till they hae got oor chairs an' fees,
An' there's an en' o' you an' me.
For a' that ken the woman craiter
Maun own it is her foremost faitur
To tak' to lecturin' by natur';
An' hoo she 'll do 't ye sune 'll see."

Information Wanted.—We have from time to time noticed the preparation, by Dr. Butler, of a Medical Directory for the United States. We have just received a note from the doctor, which explains itself, and we insert it entire:

"Circulars calling for information for the *Medical Register and Directory of the United States* are rapidly being sent out, and this portion of the labor will soon be completed. It is earnestly desired that the responses be as prompt and as full as possible. It is important to physicians, who have any education or standing, that they appear properly on this record, as the work will be one of permanent value, and will be constantly referred to. The forms containing the Directory of the first set of eleven States and Territories (Alabama to Georgia, alphabetically, inclusive), are now in the hands of the printer, and there are but a few days in which information can be inserted in those pages.

"Officers of public medical institutions of all kinds, hospitals, asylums, dispensaries, colleges, medical societies, etc., are particularly requested to furnish us with lists, catalogues, announcements, etc., in order to give brief histories of these institutions, and for use in perfecting the *Register and Directory* in all its parts.

"It is intended that the work shall be exhaustive, and as nearly correct as may be, and it will be issued as speedily as possible; but the labor is immense, and the work is delayed by the want of promptitude in receiving replies to circulars and letters."

Digitalis in Cholera.—Dr. Laughlin, of Indiana, writes a medical friend in this city a suggestion in regard to the use of digitalis as a remedy in cholera, given in large doses; as—say (of the tincture) from one to four drachms, according to the urgency. He says:

"From its known physiological effect of contracting the arteriales and capillaries, and thereby arresting hemorrhage, I was led, on theoretical grounds, to try its power in arresting the diarrhetic discharge of cholera morbus, with marked benefit, as I conceived. Notwithstanding one of its therapeutical effects is stated to be that of catharsis, particularly when administered in large doses, I believe it so contracts the capillary vessels as to arrest, in a great measure, the colliquative discharge of the disease. In cases of persistent emesis, the drug could best be used in the form of digitaline, hypodermically administered."

Dr. George Mendenhall, after an absence in Europe of one year, has just returned to his home in this city. The doctor's visit was partly professional, but chiefly for health. His tour was somewhat extended, and, being appointed Commissioner for the United States by President Grant, he was present at the opening of the Vienna Exposition, and, by his energy, contributed largely in bringing order out of chaos in the American department. Dr. Mendenhall will not resume general practice, but in a short time he will be found at his old quarters, corner Eighth and Race, where he will attend to some office and consultation business.

The Undeveloped West.—The National Publishing House of this city will soon issue a volume with the above title, to be sold only by subscription. We have been favored with advance sheets, from which we see that the mechanical execution, engravings, etc., give promise of an attractive as well as readable book.

Proceedings of the American Medical Association.—As it will be some time before the regular volume of Transactions is out, the Secretary, Dr. W. B. Atkinson, Philadelphia, will send a copy, in pamphlet, of the proceedings, for fifty cents.

Reviews and Notices.

Insanity in its Relations to Crime. A Text and a Commentary. By WM. A. HAMMOND, M. D., Professor in Bellevue Hospital Medical College, New York. New York: D. Appleton & Co., 549 and 551 Broadway, 1873.

The text of this little monograph consists of a condensed recital of three remarkable cases of murder: the Leger case and the Jobard case, from the "Causes Célebres," and the Jules case, related by M. Devergie. Dr. Hammond uses these cases as the basis of some views upon psychological points, as, what constitutes crime; sin and crime not identical; the object of punishment; the power of self-control in the insane; responsibility and punishability; together with other kindred topics, bearing upon the study of the responsibility of the insane. The whole book is readable, and will doubtless accomplish what the author intends—increased attention to him as an expert in this class of cases.

A Compendium of the Ninth Census. Compiled under the direction of the Secretary of the Interior, by FRANCIS A. WALKER, Superintendent of the Census.

We are under obligation to the Secretary of the Interior for this somewhat bulky volume; for, though large, the information spread over the vast space of the Census Report is put into such systematic and condensed shape that the student of statistics may easily and readily find any desired material. Thus, population forms one set of tables; pauperism and crime, another; occupations, manufactures, etc.

The Mechanism of the Ossicles of the Ear and Membrana Tympani. By H. HELMHOLZ, Professor of Physiology in the University of Berlin.

This is the most complete and exhaustive treatise on the ossicles of the ear and the membrana tympani which has ever been written. It treats first of the anatomy of the membrana tympani, and afterward of the hammer, anvil, and stirrup respectively. The attachments and movements of the bones are considered separately, as well as in their concerted action. It will doubtless be considered authority for many years, as the name of its illustrious author is sufficient to recommend it.

For sale by Robert Clarke & Co. Price, $1.25. S. C. A.

Maunder's Operative Surgery. Second edition.

As all systematic works on surgery contain directions for the performance of the various operations, it would seem that a book devoted exclusively to the operative department should be fuller in details than, and otherwise show an improvement on, the ordinary instructions given in the general works. Such, however, can hardly be claimed for Mr. Maunder's "Operative Surgery." For, though it treats of most of the operations of surgery, great and minor, it is sometimes unsatisfactorily brief, and occasionally wanting in clearness of description. But brevity is unavoidable when it is attempted to treat of so many subjects, in a volume so small. Admitting that his work differs but little from other similar ones, the author yet claims "originality" for methods he gives for the excision of the elbow-joint and removal of the lower jaw. The book is handsomely printed, in London, and illustrated with 164 fine cuts.

For sale by Robert Clarke & Co. Price, $2.50. T. K.

Allingham on the Diseases of the Rectum. Second edition.

This little volume, devoted to the description of a class of diseases of frequent occurrence, appears in a revised form, as the second edition. It may be accepted as a very correct guide in the investigation and management of the various affections of the rectum—its teachings being based on the author's experience as Surgeon to St. Mark's Hospital, London, an institution devoted exclusively to the treatment of rectal affections. In it will be found descriptions of rectal abscess, fistula in ano, hæmorrhoids, fissure of the anus, polypus of the rectum, ulceration, stricture and procidentia of the rectum, pruritus ani, impaction, cancer, rodent ulcer, villous tumor, neuralgia, etc.

The language is clear, and the descriptions full; and the chief points are illustrated by brief histories of cases, giving the work a clinical air, and thereby making it the more interesting. We heartily commend it to the profession.

For sale by Robert Clarke & Co. Price, $2.00. T. K.

A Treatise on Apoplexy. By JOHN A. LIDELL, A. M., M. D.

In addition to the subjects given in the title, this work treats of cerebral hæmorrhage, cerebral embolism, cerebral gout, cerebral rheumatism, and epidemic cerebro-spinal meningitis.

It is based upon a large experience of the author, as well as the experience of others—the latter being presented much more in detail than seems necessary, or than is consistent with economy of the reader's time. The views of pathology and therapeutics are in accord with the most recent doctrines and observations, and will, in the main, prove reliable as guides in practice.

Brevity of space precludes any discussion of points, wherein we differ from the author. Suffice it, that we regard his work as valuable, and rendered more useful for reference by the very complete analysis of contents of each chapter.

Published by Wm. Wood & Co., New York. For sale by Geo. E. Stevens & Co., Cincinnati.

W. H. T.

Married.—At the residence of the bride's mother, July 2d, 1873, by Rev. Chapman, Dr. E. A. Farquhar, Jr., of Paris, Stark county, Ohio, and Miss Lucy Fawcett, of Chester Hill, Morgan county, Ohio.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

VOL. XVI.—SEPTEMBER, 1873—NO. 9.

Original Communications.

Art. I.—Acute Inflammation of the Tympanum and Tube.

By A. D. WILLIAMS, M. D., St. Louis, Mo. (From advance sheets of a work on "Diseases of the Ear," soon to appear.)

This develops, usually, suddenly, and, if let alone, will run its course rapidly and subside either totally or partially. In the latter event the acute trouble subsides into what is called *chronic purulent inflammation* of the drum (see tympanic otorrhœa below). As already stated, the disease is often secondary in its character; that is, it frequently, if not in the majority of cases, accompanies or follows acute inflammation of the throat and nose, which condition is popularly called *bad cold;* hence the people think and declare that the bad cold was the starting point of the ear trouble. Every one knows very well, that bad colds (acute naso-pharyngitis), in their development, manifest three short but well-marked stages: 1. The dry or congestive stage, in which the nose and throat are unnaturally dry; this, however, lasts, comparatively, a short time, perhaps not over a few hours. 2. The moist or watery stage follows the dry, as is indicated by the copious flow of water from the nose and the moist condition of the throat. This watery secretion changes rapidly into pus, which marks the beginning of 3. The purulent stage, which is characterized by a free secretion of pus from the surface of the inflamed mucous membrane. This is constantly blown from the nose and cleared from the throat till the bad cold is well and the head is free.

The acute inflammation of the tube and drum being, as a rule, so closely connected with acute naso-pharyngitis, must partake largely of the same nature, if, indeed, it is not even identical with it. The inference, therefore, is that the disease in the drum would run through the same dry, moist, and purulent stages, as in the throat, but, possibly, in more rapid succession, as the tympanic membrane is thinner and more delicate. The rapidity with which the suppuration sets in is a prominent characteristic of the disease; hence Gruber designates it *otitis media purulenta.*

CAUSES.—Besides the *bad cold* cause, just referred to, the next most frequent cause is the acute exanthematous diseases—measles, scarlet fever, small-pox; to which the continued fevers may be added, as an occasional cause of acute inflammation of the tympanum. The eruption of the exanthematous diseases takes place, to some extent, on all the mucous membranes, that of the drum being no exception. While other mucous membranes may recover without suppuration, that of the drum is very apt to suppurate on account of the closed cavity in which it is contained. As soon as the exanthematous inflammation begins in the mucous membrane of the tube, the swelling closes the caliber of the tube and prevents the ingress of air and the egress of whatever secretion may take place in the drum cavity. The want of ventilation and the accumulation of secretions, together, aggravate the inflammation of the tympanic mucous membrane, and often cause it to suppurate.

Then again, as already remarked, spontaneous inflammation of the drum is occasionally observed where no evident cause can be made out. In general terms, whatever influences are apt to excite inflammation in mucous membranes, in general, may produce inflammation in the drum.

SUBJECTIVE SYMPTOMS.—The patient suffers intensely. The pain is not confined to the ear, but extends to the face and whole side of the head. If both ears are involved, the whole head is painful. Troeltsch says: "It is sometimes difficult to tell whether the pain is in the upper molar teeth or in the ear."

The pain is worse at night. The patient can not sleep, and can not get even a little rest, for want of which, and in consequence of the suffering, his strength is rapidly reduced. Great heaviness and fullness about the ear are complained of. There is always a high degree of deafness, which sometimes becomes complete. Distressing noises of all kinds are constantly present in the ear. Bells, hammers, blacksmiths, steamboats, etc., are heard. The patient sometimes thinks that these noises are real, and looks around to see where they come from. The suffering is often increased by movements of the lower jaw, as in swallowing and chewing. In the meantime more or less febrile disturbance of the general system shows itself, and usually increases toward evening, when considerable delirium may supervene. To all this, add vertigo and sometimes nausea, and the picture is complete.

From this array of symptoms it is not difficult to imagine that the patient's countenance would have a peculiarly sad expression in acute tympanic inflammation. Nor is it strange that physicians, not unfrequently, mistake acute inflammation in the drum for cerebritis or meningitis. The similarity in symptoms is very striking indeed. In children, in whom this form of acute aural trouble is quite common, before they are able to talk and tell where they suffer, it is no easy task to diagnose between a brain disease and such an aural affection, particularly so when there is nothing about the child's ear to attract the attention of the physician. Some years ago, two or three prominent physicians in Cincinnati treated a child, as they supposed, for acute meningitis. The symptoms were so severe they all thought the child would die. Suddenly a discharge appeared in one ear, which was the first intimation they had of any ear trouble, and immediately the brain symptoms subsided.

Just now I am treating a child for tympanic otorrhœa. When the trouble began, some six weeks ago, the attending physician thought the child had acute meningitis, and prognosed accordingly. A discharge suddenly appeared in each ear, and put an end to all brain symptoms.

The only way for physicians to avoid making such mistakes is to look into the child's ears under such circumstances, and see if there is any trouble in the drums. This is easier said than done. It is somewhat difficult to make a satisfactory examination of the ears of a small child, but it can be done, and should be done much oftener than it is by general physicians. These head symptoms, most probably, are caused by pressure upon the fluids of the labyrinth, through the fenestra ovalis and fenestra rotunda. The pressure upon the sympathetic filaments of the tympanic plexus may have some influence in producing the brain symptoms. The intimate vascular connection between the tympanic and cranial cavities may cause an actual congestion, of a sympathetic nature, of the meninges, and, possibly, of the substance of the brain. Some of the German writers entertain this last opinion or idea in regard to the brain symptoms.

OBJECTIVE SYMPTOMS.—As already stated, the nose and throat, the latter more especially, are usually, though not always, acutely inflamed, the patient having more or less difficulty, and often some pain, in swallowing. If the exanthemata are the cause of the ear trouble, the inflammation in the throat will depend upon the same cause. It is rare, however, that a physician is called to examine the ear during the exanthematous inflammation in the throat. That, being *self-limited*, passes off in comparatively a short time. On the contrary, a similar inflammation in the drum, when once started, perpetuates itself, on account of the tympanic cavity becoming closed, as stated above, until, finally, suppuration takes place, the accumulated pus breaking through the membrane and discharging externally, giving rise to tympanic otorrhœa (see below).

The membrana tympani, in the early stage of the disease, has an increased redness, which is due to the inflamed mucous membrane inside, shining through it. The glistening appearance of the membrane is somewhat changed. The handle and short process of the malleus commonly remain visible, which distinguishes the passive or secondary inflammation of the membrane from acute myringitis, already considered.

At a later stage, the membrane is pressed, somewhat, outward as a whole, or one or more points rise above its general surface. As the pressure increases from within, by continued purulent accumulation, these points sooner or later begin to show a yellowish tint, caused, most probably, by the pus within, showing through the thinned membrane. Or a secondary process of suppuration is set up in the substance proper of the membrane, in consequence of the internal pressure. The yellowish tint increases, till, finally, the membrane ruptures, or ulcerates through, in one of these points, rarely in more than one place. The light spot is reduced early to a mere point, or disappears entirely, on account of the change of curvature of the membrane.

In general terms, the changes in the membrane are the result of passive or secondary inflammation.

DIAGNOSIS.—The history of the case makes this comparatively easy. If a painful affection of the ear accompanies or follows closely upon an attack of acute naso-pharyngitis, or one of the eruptive (exanthematous) diseases, there is very little doubt as to the diagnosis. The only disease, for which acute inflammation of the drum may be mistaken, is acute myringitis. The characteristic history of the latter distinguishes it readily from the former. Besides, the appearances of the membrane are different in the two diseases.

PATHOLOGY.—The pathological process is inflammation, as is implied in the name. It is not known whether there is a pathological difference between spontaneous (following bad cold) and exanthematous (following the eruptive diseases) inflammation of the drum. The pathology of these self-limited eruptive diseases is not settled. They may have a specific poison and they may not.

PROGNOSIS.—Acute inflammation of the drum, as such, may be said to be self-limited. It runs its course, as a rule, in a few days; does its work of destruction upon the membrane, and subsides into a chronic form, resulting in and perpetuating a purulent discharge from the ear, which I shall treat of below as tympanic otorrhœa. This disease of the drum rarely ever terminates without causing perforation of the drum-head. The prospect, so far as the hearing is concerned, is in proportion, as a rule, to the size of the perforation. The smaller ones will heal; the largest ones will not. The hearing power will depend again upon the amount of damage done to the ossicula auditus and the mucuous membrane of the drum.

There is more or less danger to the life of the patient on account of the close proximity and intimate connection between the tympanic and cranial cavities (see anatomy above).

The most skillful treatment does not always prevent a perforation of the membrane; in fact, it is sometimes advisable to make an *artificial* perforation, for reasons that will soon appear.

TREATMENT.—In order to get a correct idea of the nature of the best treatment, it is well to recall for a moment the condition of the ear. As soon as the trouble begins, the swelling closes the tube and makes the drum, practically, a closed cavity. The inflammation in the drum cavity goes on and soon pus begins to form. This soon fills the cavity and begins to press the membrane outward. In all probability the pus enters the mastoid cells and may accumulate there. The general condition of the drum, therefore, is very similar to a deep-seated abscess. The main indication for treatment is also similar. The great object is to give vent to the pus and mucous that collect in the drum. The best way to do this is to inflate the tympanum. The wind, in passing, mechanically opens and frees the tube, and the confined accumulations are thus allowed to discharge, at least in part into the throat. This is certainly the most rational way to treat acute inflammation of the drum, as soon as the diagnosis is established. In cases of doubt the inflation may become necessary in order to confirm or disprove the diagnosis. As might be supposed, inflation does not prove to be very painful in such cases; besides, it affords almost instant relief, when it succeeds well, from the distressing feeling and severe suffering. Inflation affords not only relief, but it gives the very best security against injury to, or destruction of, the membrana tympani and the little bones of the drum.

The frequency of the operation must depend upon circumstances; once, twice, or even three times a day, if the amount of suffering requires it, till the recovery is complete. Usually one inflation per day is sufficient. The operation should always be performed with the greatest gentleness in the manipulations; still, in pressing the balloon, force enough must be used to make the wind enter the drum freely; for upon that depends the success of the treatment. If the force of the air should cause the membrane to rupture, that would be no misfortune, but rather favorable, as the secretions could then escape externally into the meatus. If, from any cause, inflation is impracticable; or, if practicable, it does not give satisfactory relief to the symptoms, then *paracentesis* of the membrane should be made at once and the pus allowed to discharge externally. The incision or puncture should be pretty liberal, so as to afford an easy exit to the secretions. The method of the operation has been given above. The puncture should be made in the most prominent point of the membrane, that is to say, where it would most probably rupture, if let alone. The proper place is usually indicated by a yellowish spot or some other characteristic mark. After the puncture is made, the ear should be immediately inflated by catheterization, if practicable;

if not, Politzer's method may be substituted. The object of the immediate inflation is to drive everything out of the drum into the meatus. This should be repeated once a day, so as to keep the incision in the membrane open as long as possible. If, however, it should close (it often closes in spite of all efforts in twenty-four hours), and the ear becomes painful again, the operation should be repeated again, and so on, till the recovery is complete.

In favorable cases the suppuration ceases in from one to two weeks. It not unfrequently happens, however, that the acute inflammation subsides into a cronic form, which perpetuates the discharge indefinitely (see tympanic otorrhœa below).

I do not believe much in internal medication in order to reach acute tympanic affections. The German authors, particularly, recommend a rigid antiphlogistic treatment, both locally and internally. I rarely ever purge, except when there is some special reason for it, and then I use mild cathartics in preference to the drastic. I may say I never blister in acute affections of the drum. I have no objection to applying from one to five leeches to the ear, but think they can be easily dispensed with.

I never make cold applications to the ear, but very often apply warm fomentations; of these I like the hop poultice the best, and frequently use it; next to this, I direct the ear to be filled repeatedly with warm water. Instead of the warm water, the steam from boiling water may be allowed to stream against the ear. But, as an external local application, I use a great deal, anodyne solutions for the purpose of alleviating the suffering. Of these the very best, because most efficient, is a solution of atropine (3 to 5 grs. to ounce of water), several drops of which should be dropped into the ear every two or three hours, according to the amount of pain.

This often relieves the suffering very promptly and effectually. For children the solution should be weaker (1 to 2 grs. to ounce). Morphine solution may be used locally in the same way. If these anodynes, used locally, do not relieve the suffering, then I give liberal doses of opium internally, particularly Dover's powder, which determines to the skin. The opiates should be given, more especially, at night, when the pain is most severe.

In cases, where perforations have taken place, or where punctures have been made, the mucous membrane of the drum may be medicated from the external meatus by *mild astringents*, particularly a weak solution of compound nitrate of silver, but only after copious suppuration has set in. In an earlier stage the astringents are apt to aggravate the inflammation. I never inject medicated solutions into the drum, through the catheter, as I do not think it advisable to do so, on account of the irritation that follows.

The catheterization is to be continued whether paracentesis has been made or not, till the recovery is complete.

The external meatus is to be kept clean by syringing it as often as necessary.

The accompanying throat trouble is to be treated according to particular indications. In general terms, warm applications are to be used externally over the throat in the acute stage. The warm vapor from hot water may be advantageously inhaled. After the acute stage has somewhat passed off, then mild astringents, in the form of gargles, may be used. A warm solution of common salt is perhaps the best. According to my experience severe treatment is not tolerated well and should be avoided.

The resulting perforations of the membrane are always to be left to themselves to heal. No treatment specifically aids the healing process in them.

When the tympanic inflammation depends upon one of the exanthematous diseases and the patient is quite sick, it is well to wait a little till convalescence begins, before catheterization is attempted, as it is difficult to succeed well in the operation on a sick person. Besides, in the eruptive stage, the mucous membrane of the nose is often so swollen as to make the passage of the catheter very painful. Usually the development of the disease and the progress of the suppurative inflammation are so rapid that the patient hardly has time to call attention to his ear before the membrane ruptures.

In fact, the otorrhœa is, sometimes, the first evidence the patient has of trouble in his ear, the pain being attributed to the general headache, that always attends the exanthematous disease. Consequently the physician is rarely consulted in such cases before the otorrhœa has actually set in.

Art. II.—Albany County Medical Society—Semi-Monthly Meeting, held May 28th.

Reported by F. C. CURTIS, M. D., Secretary.

[In view of the general interest now prevailing in the minds of people, especially in large cities, as to the importance of pure drinking water, we reprint the following discussion.—ED. L. & O.]

The following resolution, adopted by the common council, was transmitted by the clerk of that body to the secretary of the county medical society:

"*Resolved*, That the physicians of the city of Albany be requested, individually, to communicate to this board their opinion as to whether the water of the Hudson river is sufficiently pure and wholesome to be used to supply the city with water for the use of its inhabitants."

A meeting of the society was held to discuss the question proposed by the board of common council. About twenty-five members were present, besides other gentlemen.

The president, Dr. Vanderveer, opened the meeting by a statement of the subject for discussion, saying that it was one of grave importance to us all, and that we should discuss it in a calm, impartial manner. We were called upon to decide as to the fitness of the river water between here and Troy—not as to the cost, or as compared with other sources.

Dr. Devol said that he had not very much practical knowledge of the river water. Water in general is the great solvent, taking up a great many of the matters found in nature, and holding them in solution. He looked upon the river as the receptacle of a vast amount of refuse matter, which, if retained in solution, would certainly render it unfit for use. This seemed too plain to require any argument.

Dr. Levi Moore made the following remarks: Mr. President, the question before this society is one of great importance. We are asked as physicians if the water of the Hudson river is good in a sanitarian sense. The feasibility of this source of supply and its economic advantages have nothing to do with the question. The hygienic aspect is the only one for us to consider. I trust that whatever action we shall take will be prompted by a sincere desire to secure to the public the greatest possible immunity from the germs of enteric and other diseases which we are so often able to trace to the use of impure, tainted, or sewerage water. Whatever experts may say in commendation of sewerage water, even largely diluted with purer water, and taken from a rapidly moving current, although it may be clear and sparkling, and possess no unpleasant taste or smell, yet the common instincts of our nature repel it as unfit for domestic use.

I need not bring to the attention of this society instances where typhoid fever, cholera, dysentery, and other diseases have been clearly traced to the use of impure or sewerage water. These cases have been too numerous and too well authenticated to be doubted. The germs of disease are often too minute, too subtle to be weighed in the chemist's balance, or to be detected by his most careful analysis. Because he can not detect any death-dealing poison in the limpid fluid, does he therefore presume to say that there is none, and that the water therefore is wholesome and good? Because the continued use of small doses of an active poison does not kill at once, is it any the less a poison?

My own conviction is, that the water of Hudson river is entirely unfit for domestic use, receiving as it does the sewerage of our city, and, within ten miles to the north of us, the sewerage of the cities of Troy and Cohoes, and the village of West Troy. All this sewerage, together with that from the villages on the Hudson and Mohawk flows past our city and mingles with the sewerage which is here poured into the river. Admitting that the water of the Hudson river is passably good, and that its uses for domestic purposes are attended with but small risks in a hygienic point of view, still there are most cogent reasons why this source of supply should not be selected. I see in the no-distant future a dense population, double, quadruple the present number, in the manufacturing city of Troy, and in the young city of Cohoes, with its matchless water-power. West Troy will have its population largely increased, and the beautiful hill-sides between that point and this city are yet, I believe, to be thickly populated. All this drainage will flow into the Hudson river only a few miles above us, tainting its waters and rendering them each year more and more unfit for domestic use. The short-sighted policy of supplying other cities with water impregnated with sewerage has been so often recognized and deprecated that the very persistency with which we are shadowed with this practicable scheme for an abundant supply of pure water has something ominous about it. It is a notorious fact that, even now, the drainage from a large and rapidly increasing population flows into our present source of supply. This should be remedied at the earliest possible moment. The very fact that it has continued till it has become so serious a matter, shows culpable carelessness somewhere. This society should take such action as the importance of the subject demands.

Dr. W. G. Tucker read a paper on the analysis of river water. This, he said, contains organic matter generally in much greater proportion than spring water does, because of the surface drainage passing directly into rivers. Inorganic matters which they contain are of little moment except as they affect the hardness of the waters. Organic matters, from various sources, are diffused through the water, and being brought into contact with the oxygen contained therein, gradually change into carbonic acid, ammonia, and nitrates. Thus the oxygen in water plays an important part in the purification of water. This is especially important where rivers receive, in addition to surface drainage, a large amount of sewage from towns, and, in hot weather especially, this natural process of purification is inadequate to prevent a putrefactive change.

The wholesomeness of water appears to be intimately connected with its state of aeration, as the proportion of oxygen is liable to be lessened by the decomposition of organic constituents.

Hudson river water was examined by Dr. Tucker by what is known as the permanganate test, which is based on the oxidation of organic matters, this being preferred as the most delicate. During October and November last, he made several examinations, with the result that about $\frac{4}{10}$ of a grain was liberated to oxidize the organic matter in one gallon; city water examined at the same time required $\frac{1}{8}$ of a grain per gallon. Early in February river water required $\frac{16}{100}$ of a grain; city water, $\frac{7}{100}$. In April $\frac{33}{100}$ of a grain was required for river water; city water was not tested at this time.

Prof. Nichols, of Troy, examined, by the same test, water from the river above Waterford bridge and that in the Troy reservoir, and found a proportion in favor of the latter of 1 to 4. Other properties of the river water are—a yellowish-brown or green color; it is turbid, with considerable sediment on standing; it contains ammonia in traces; its hardness is 3.9 degs., city water averaging 5 degs.

Prof. Maynard, of Troy, found 4.94 grains of solid matter per gallon, 1.08 grains being organic; and he expresses the opinion that the water of rivers receiving sewerage are unfit for domestic use.

The examination of water made by Prof. Chandler, Dr. Tucker said, does not fairly represent the character of the water, because the sample was taken from under the ice in the latter part of the winter, when, being at a low temperature, it would hold less in solution than during the summer. There is also at that season much less opportunity for foreign matters to get into the water. Prof. Chandler's report gave, however, at this season, $\frac{7}{10}$ grain per gallon of organic matter.

Dr. Tucker believed that taking river water for a city supply involved a great risk. A single analysis is not sufficient to determine the purity of the water, but it must be examined at different seasons, states of the weather, and stages of the river. The examinations already made do not warrant its use.

Dr. Freeman said that he did not understand that the question was limited to the fitness of the water taken from a point opposite the city. He thought the river ought to be used as our source of supply, being reliable, permanent, and abundant at all seasons. It is supplied at its source and along its course by mountain springs. It would certainly be pure enough if taken from a point north of Cohoes; and, besides, from this elevation it would supply the city without pumping.

Mr. G. Michaelis, by a vote of invitation, read a paper as follows:

GENTLEMEN: It is not the place here to give you a review of the chemical and mechanical properties of the water; it is another point altogether which we have to take in consideration, and that is the purity or impurity of it.

All waters, river water as well as well water, are powerful solvents of the ingredients of the soil, and contain therefore a variable quantity of the salts which are frequently found in it. They are principally chloride of sodium, sulphate of lime, magnesia salts, and so forth, which give the water, especially when it contains carbonic acid, a refreshing taste, and there is no doubt that they have a healthy influence on the human body.

But all waters, no matter whether river or well water, contain more or less organic matter, and it is supposed—to a certain point certified—that the latter is obnoxious to the human body, and produces sickness. The sources wherefrom the organic matter in rivers come are well known; they are principally the sewage and manure of the towns and villages through which it flows, consisting of almost everything—urine, fæces, dead animals, and the decay of the plants of the stream. A water thus impregnated is undoubtedly not very healthy. On the other hand, speaking of well water, we must state that wells in cities are very quickly spoiled by infiltration of manure, and thus become bad.

I made an experiment which showed this in the spring of 1866, when cholera was imported from Russia to Germany. This raised general alarm throughout the country, and more so since some prominent physicians supposed that the ground water had something to do with the spreading of the disease. I was at that time in Posen, a city of about 65,000 inhabitants, in the chemical laboratory of Dr. Mankiwich, occupied as his assistant. This gentleman received an order from the city authorities to analyze the water of the city wells. A thorough investigation proved that nearly one-third were in a bad condition and entirely unfit for use; but some of the wells, even those with a large amount of organic matter, appeared clear to the eye, while others had a good taste and very little smell. An analysis made of the water of the river Warthe proved that it was in at least as good a state as the wells.

We must understand that there are two distinctly different organic matters in the water: such are those dissolved in the water, and those only mechanically suspended in it. The mechanically suspended matter can be easily eliminated by a careful filtration, as filtering through gravel or sand and charcoal, but the greater part of organic matter is dissolved in the water and can not be separated by mere filtration. It is beyond doubt that the dissolved organic matter is the source of the bad odor, and the yellow, brownish color. Pure water is colorless. Now the question is, whether there is a possibility of eliminating the dissolved organic matter or not? This question was satisfactorily answered by Prof. Medlock. This gentleman was requested, in the year 1856, by the Amsterdam Water Company in Holland, to analyze their water and to find the cause of the bad smell and fishy taste (I wish you to understand that the water in Amsterdam is let through iron pipes). Medlock received five samples of water for analysis, —four of them from pipes in the city, and one before the water entered the reservoir of the company.

In the water from the works, before it came in contact with the iron reservoir and pipes, this chemist found 0.95 grains of iron, while in the other samples the iron was reduced to an unweighable trace; thus instead of taking up iron from the service pipes it was not alone diminished, but even all precipitated. Notwithstanding the almost entire precipitation of the iron actually in solution in the water which had passed the iron pipes, it formed an objectionable red deposit on standing, while the water from the works before entering the pipes, holding in solution nearly ½ grain of iron per gallon, formed no deposit. He examined the deposit chemically and microscopically, with the following result: On motion, the precipitate charred and was almost entirely consumed, showing them that it consisted of organic matter; under the microscope the deposit was seen to consist of plants in various stages of decay—many of the fibers had even retained a perfectly organized structure. He remembered the important fact established by Shonbein, that copper and platinum can convert ammonia into nitrous acid, and he found that iron also transforms ammonia into nitrous acid; and, by further investigation, he found that strips of sheet-iron, placed in water containing ammonia or organic matter capable of yielding it, act almost as quickly and well as the metal in a finely divided state.

Now he made different analyses with water brought in contact with iron, and water in no contact with iron, and the result was, that while the water which was not brought in contact with iron contained 2.10 organic matter and 0.95 iron, the other contained only an unweighable trace of both; which showed plainly that the organic matter contained in the water was either decomposed or thrown down (rendered insoluble by contact with iron), and actually, this water when filtered was clear, of good taste, had no smell, and was free from organic matter.

All organic matter either contains nitrogen or is non-nitrogenous. The latter consists almost always of carbon, oxygen, and hydrogen, and is very quickly, when no more under the vital influence, converted into carbonic acid and water. The nitrogenous matter is mostly of animal origin, and consists of nitrogen, oxygen, hydrogen, and very often sulphur and phosphorus, and is dissolved or suspended in water, very rapidly decomposed into gases very offensive to taste and smell, and undoubtedly very obnoxious. But all these are immediately destroyed by the presence of nitrous acid. Medlock proved, as before stated, by a series of subsequent analyses, that iron produces nitrous acid by its action on the nitrogenous organic matter, which is the most destructive power nature has. Muspratt calls it "nature's scavenger." This chemist found, as a general result, that by allowing water to be in contact with a large surface of iron, in about 48 hours every trace of organic matter was either destroyed or rendered insoluble, in which state it could be purified effectually by filtration.

I did the same with our Hudson river water, and obtained the same results. After subjecting the most filthy water to the influence of iron sheets for forty-eight hours, I found that it was almost entirely freed of all organic matter.

I submit to the honorable society some samples of Hudson water which I treated in a similar manner, and it can be easily seen that the iron sheets have had some influence on it; there is a decided deposit.

[Specimens of water treated with iron sheets, which appeared to be perfectly pure, were exhibited.]

It would perhaps be of some value if similar researches should be made, and in case the results should be favorable, it would not make any difference wherefrom we receive the water, as long as we are able to purify it in such a manner as to render it a wholesome beverage for the community.

The experiment shows the existence of organic matter in the river water.

Dr. Sabin, of West Troy, said that analyses which had been presented show the water opposite the city not sufficiently pure for use. He thought the best plan was to take water from the river just below the state dam above Cohoes and Green Island. At this point it is purified by running over the dam.

Dr. Wm. Hailes spoke of experiments which had been made to purify water, showing it to be a fallacy that water is purified by flowing over a dam. Pure water was mixed with fæcal matter in vessels, and poured day after day over a rough board, allowing it thereby to be most intimately mixed with air, and at the end of two weeks it was still found impure. It is also a fallacy that digging wells and so filtering purifies water, as it has been proved that filtering does not purify it. The germs of disease are not removed by it. He thought that river water here, and even at the state dam, is unfit for use.

Dr. Crothers followed at some length. He assumed hypothetically that the river water was better in quality than that we are now using. The impurities the river water contains are disseminated over a wider surface, comparatively, than those in the water we are using. Nevertheless, he maintained that, as water is a medium for spreading disease, it was unfit for ordinary use. He said, the bad condition of the water we now use is caused by a neglect to keep out impure drainage, and allowing it to remain in shallow ponds never cleaned. He held that the impurity of our water affected the health of the city, and was a constant threat of epidemic diseases. He maintained these points at much length.

Dr. James S. Bailey remarked, that he had been much interested in what had been said, especially in the careful analyses of the chemists; but it had occurred to him that they might be more technical than practical. The air we breathe might by analysis prove to contain deleterious elements, but still we live and apparently enjoy health. So with river water; it undoubtedly contained organic matter, but when taken into the stomach does not prove deleterious to animal economy. He had known persons—in fact, whole families—to drink river water constantly with impunity, and from southern waters, which were known to be more deeply impregnated with earth and vegetable matter than the water of the Hudson. He had known families to use water from stagnant pools covered with green scum, by brushing this aside; and the water, when used, did not produce unhappy results. We well know, without the aid of chemistry, that the water of the Hudson about this city, impregnated with sewage, is unfit for culinary or drinking purposes; but it seems that it can be obtained above the city. We need the quantity as well as the quality, and he could not see where it could be obtained, unless from the Hudson. There are processes in nature—chemical processes, really—by which water is purified, which is exemplified in the commingling of the waters of the Mississippi with those of the Ohio at Cairo, one coming from the limestone country, and the other ladened with earthy matter; which, when united, had the desired effect of producing a chemical change—in fact, a filtering process; and it is a fact well known by river men, that water in this vicinity is unusually pure and wholesome.

Dr. Craig said that he believed the Hudson river water was purer at its source than any other. It had been used for very many years for drinking purposes. Ships going to sea came up into the Hudson river and took their supply. He said, the Hudson river contains a volume of water four times as large as the river Thames, and the city of London is supplied from the latter. He thought the society should not be hasty in its judgment, or too ready to condemn this source of supply.

Dr. Davis remarked: The statement made here this evening that river water has been used with impunity, and is therefore innoxious and wholesome, reminds me of accounts given by travelers of some barbarous tribes who habitually eat their food in the most offensive state of putrefaction and decay. Civilization, with its overtasked brain and nervous system, can never withstand such vile and unwholesome food. No more can we long endure the baneful influence of river water filled with putrescent vegetable and animal substances drained from an extensive region of country, and to which are added the sewerage of cities, holding in solution vital and putrefactive animal poisons, without subjecting ourselves to the natural and inevitable consequences of taking into our systems those active morbific agents which have ever proved most destructive to humanity. The best water is that derived from springs, which have their original reservoirs deep in the earth, or from those lakes having a natural outlet but holding temporarily the water from these springs. It is true, the contents of these reservoirs has once been surface water, but, by percolating through the soil, sand, and gravel beds, has thus been filtered and freed from every noxious element. Next to these waters, in purity, are those upland streams that flow from them. As we leave these sources water becomes less pure, till we reach those large rivers that flow through the valleys and receive numerous tributaries with extensive surface drainage. These rivers are the common receptacle of every unclean thing; and when the shores are covered with the dense population of large towns and cities, the sewerage of every dwelling, prison, hospital, and sick-room is mingled in the general mass of its impure waters, containing epidemic, contagious, and infectious elements. Chemistry has its range and its limits, and has never been able to detect those attenuated and subtle principles that produce the desolating ravages of cholera, cerebro-spinal meningitis, small-pox, fevers, and numerous other diseases; and yet, of their existence, no truth in the whole history of medicine is better established. This subject, with great propriety, addresses itself to the medical profession, and I hope we shall show ourselves no less worthy to serve the interests of the public in the preservation of health than for its restoration when lost.

The question with which the water commissioners have honored us is not the merits of river water as compared with our present supply, but, "Is the water of the Hudson river pure and wholesome for domestic use?" I hope this society will place upon it their disapprobation, and will express with emphasis their answer, "No."

Dr. Wm. H. Bailey said that he did not believe any source equal to the Hudson, when we take all things into consideration. It is not necessary to take from a point opposite the hospital, or even between here and Troy, although he believed that pure water might be found below the latter place. But we may at least take water above these sources of sewerage. Water does not retain organic matter for any length of time, but it purifies itself. The upper Hudson flows through an elevated country, and its sources are healthy. He hoped the discussion would not be concluded without a second meeting being held, in order to get a fair view of the opinion of the society.

On motion, adjourned.

Art. III.—Cholera Infantum: Its Cause and Cure.

By ALEX. McBRIDE, of Berea, Ohio.

It is not without mature reflection and long observation that I venture to write upon this subject. It is now nine years since I made a particular observation upon this disease, and my observations upon it every year since (when the disease has occurred) have confirmed my conclusion of that time.

During the summer of 1864, I observed that all the cases of cholera infantum were preceded by heat-rash or prickly heat (*lichen tropicus*). The choleraic condition supervened in no case till after the retrocedence of the rash. In every well-pronounced case which I have seen since, where a history of the case could be obtained, it has been found that the rash had preceded the defluxions. I need not go into an investigation of the minute pathology, or attempt a graphic or classific description of heat rash. Suffice it to say that heat-rash, or *lichen tropicus*, is a red papillary eruption or rash that appears on the skin of delicate or fair-skinned persons, when the atmospheric temperature is for many days about

80° and above. I say the rash occurs to fair-skinned persons; perhaps it occurs to brunettes, but I think for them a higher heat is required. The retrocession appears to be caused by a lowering of temperature. In this the disease resembles cholera morbus. I have never seen this disease (cholera morbus) well developed, except during cool nights following hot days.

Notwithstanding what writers have said about cholera infantum being solely a disease of cities, developed by hot weather, aided by some peculiar cause, I beg leave to differ; for I assert that I have seen the disease as thoroughly developed in the airy and salubrious rural regions as it possibly could be anywhere, but it was always in a season of great heat, interspersed with damp or chilly nights, and always following the heat-rash. I have no doubt, however, that the disease in cities is more intractable; for the reason that the heat is not only greater, but not so well blended off with cool breezes as in the country.

The remote and exciting causes, then, are high atmospheric temperature long continued, alternated with a low temperature; and the proximate cause is retrocession of heat-rash.

Now, this is as I have seen it. If others have not seen it so, their failure therein can not invalidate what I have seen. Last summer I presented these observations to a medical society in Cleveland. None of the gentlemen were prepared to contradict my views, although they all said they had not made the same observations; but one gentleman went so far as to say that he had seen a case of cholera infantum with the heat-rash fully out at the time, which fact would rather contradict my observations. But, inasmuch as he is the only man who ever saw the like, I believe that no other man ever will see it, for such an exhausting and depleting defluxion as that in question is wholly incompatible with any kind of redness on the skin.

Now, if my cause and pathology be correct, the treatment is almost inevitable. There is nothing more wanted to be done than to restore the flow of blood to the surface, maintain it there, and establish a tonic state of the capillaries and of the muscular tunic of the bowels.

We are not lacking in remedies to accomplish all this. The medicines are belladonna, opium, camphor, arsenic, strychnine, and last, but not least, cantharides. The important features of belladonna are, that it is a vital or arterial stimulant, and is the quickest of all medicines to cause a flow of blood to the surface.

To a child one year old, with cholera infantum, give half a drop of fluid extract of belladonna, and you will see the pallid surface change to red in thirty minutes, and the flux will be checked; then give arsenic and opium (arterial and capillary tonics) to maintain the status of the circulation, and your case is quiet and comfortable. Add strychnine to give tone to the muscular tunic of the intestines, and there is only one thing lacking to complete the cure, and that is a diuretic: this may be nitrous ether and cubeb, or some other diuretic. Of course, all these articles are not necessary in every case.

If a case is in a very sunken or collapsed condition, I do not hesitate to give 20 drops tr. cantharides to begin with, or apply to the abdomen five inches square—twenty-five superficial inches—of fly plaster. The plaster should not remain on more than an hour or hour and a half. The dose of 20 drops of the tincture will seldom require to be given more than once. Although this might seem a large dose for a child a year old, it is no more than equal to 120 minims for an adult—a dose which I give many times every year in similar conditions, congestions, stasis, etc.

The formula which I have used with unvarying success this season, in cholera infantum and all the choleraic diseases of adults, is the following:

℞. Sol. strychnia (1 gr. to the ℥)....M lxx.
Sol. potass. arsenit...................
Belladonna, fl. ext., āā..............M xxj.
Spts. æth. nitrosi.......................M cxl.
Tr. cubeb..............................M ccxxviij.
Morphia, Munn's....................grs. j⅙.
M.*

Dose for a child one year old, 6 to 8 drops; for an adult, in a severe case of cholera or cholera morbus, 70 minims, or a teaspoonful. To be repeated once in three hours, more or less, according to severity.

The first dose generally checks the symptoms decidedly, so that frequent repetitions are seldom necessary. Although the dose of belladonna, in the child's dose, is but little more than one-fourth of a minim, it very often brings out the peculiar red flush. I never made a combination of remedies in which the different ingredients so harmonized, and seemed so much to enhance each other's value. It may appear to some that the spts. nitre and tr. cubeb are added for some whimsical reason, but not so. It has long been a maxim with me, that when powerful or poison medicines were used, which did not, as part of their therapeutic effect, increase the quantity of some natural excretion, a diuretic should be used, to carry out of the system the results of their disintegrating effects; and I find, in the use of arsenic especially, this practice has an excellent effect, and so I think of the others.

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*This formula was arranged on the theory that an ounce-phial of liquid will pour ordinarily seven teaspoons of convenient fullness (usually it will be eight).—ED. L. & O.

But this I will discuss no further at present. Let any one examine carefully each ingredient of the above formula, and I think he will be forced to the conclusion that they, by acting in harmony, will fulfill all the conditions necessary for the cure of cholera infantum and the choleraic diseases; and, in severe and collapsed cases, the cantharides may be added, to get the case over the dangerous shoals.

For the troublesome diarrhea which sometimes follows the acute stage of cholera infantum, if you do not choose to use the arsenic and opium (thus, tr. opii, 2 to 4 drops; Fowler's solution, $\frac{1}{2}$ to 1 drop, three or four times per day), the next best remedy perhaps is 5 to 10 grains bismuth, with $\frac{1}{10}$ to $\frac{1}{6}$ gr. of opium, two to four times per day.

Much more might be said about this disease, and upon the therapeutic principle of these remedies, but I do n't know that more words are necessary; the fraternity will comprehend my meaning. But this much I will add: I do not undertake to say that the disease never does or can occur without the rash preceding. I have no doubt cases will be met with where it can not be shown that the rash preceded. Neither is it true that the disease will follow every case of heat-rash.

I suppose it is *sudden* retrocession of the rash, occasioned by cold or damp air, that causes the difficulty. This rash, like measles or scarlatina, when it runs its course uninterrupted, occasions no difficulty.

As complete and threatening a case of choleraic disease as I ever saw, resulted from the sudden retrocession of the rash of scarlatina. This case was successfully turned by the application of a fly plaster to the epigastrium.

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE.

DR. J. H. TATE, PRES'T. DR. J. D. HADLOCK, SEC'Y.

Dr. Graham reported briefly four or five cases of spermatorrhœa, in which he had used the fluid extract of ergot with the best effects: some of the cases were of long duration and had resisted every plan of treatment. One case was a deplorable one, in which the mental faculties, the memory, and judgment were very much impaired. In another case epileptoid symptoms had developed. One of the cases had been under his treatment six months without benefit. All the cases derived marked and unmistakable benefit from the ergot, and most of them seem to be cured. He thinks the medicine may prove of value in this very troublesome disease. He gives of the fluid ext. ergot, 20 drops three times a day.

Dr. Bartholow agreed with Dr. Graham, as to the value of ergot in spermatorrhœa, and said he had been in the habit of using it in combination with digitalis. He thinks most of the preparations unreliable; and upon testing they yielded little or none of the alkaloid propylamia. He has found Squibbs' Fluid Extract a very reliable preparation in practice. Upon testing with the solution of potassa, the volatile alkaloid is readily detected by its characteristic fishy odor. He thinks that in the disease in question there is relaxation of the muscular fibers of the parts, and from the well-known action of ergot on the contractility of organic muscular fiber, we can account for its beneficial effects in this disease. In reply to a question of Dr. Conner, "whether ergotine would not be a good preparation," he said it was a watery extract and liable to the same objection of uncertainty of strength.

Dr. Gobrecht said many years ago, before the present preparations of ergot were in use, he was in the habit of prescribing the powdered ergot in the Pennsylvania Hospital, in similar cases, with benefit.

Dr. Ludlow said he was glad to hear from Dr. Graham, the good results he had experienced with this remedy, and he intended to test its effects in some rebellious cases which had been under his treatment.

Dr. Carson inquired if any of the members had observed any bad effects from the use of ergot. No one had observed any.

Dr. Stevens thought the Academy would be pleased to hear from our delegates to the American Medical Association.

Dr. Reamy responded with a brief report of the principal matters of interest at St. Louis; but as the outline of these matters were already before the profession, in the published reports, he did not go into special detail.

SCALP WOUNDS.

Dr. Tate (the President) reported two cases of wounds of the face. The first was a case where a boy fell on a pile of stones, and cut and bruised his face. The doctor, who first saw him, stitched the wound and applied cold-water dressings. When the case afterward come under his notice, the parts were swollen and painful and pus was confined; removed the stitches, let out the pus, and applied poultice: it healed well. The other case was one of wound of the forehead, by falling on a sharp stone; this had been stitched up closely, also, and was greatly swollen and distended with pus. The wound was opened with relief, and healed kindly. The speaker asked of the members what is the best way of dressing lacerated wounds of the face with a view to preventing deformity.

Dr. Stevens had observed that wounds of the scalp generally heal rapidly. He simply draws the edges of the wound in apposition with adhesive straps or bandages, and rarely resorts to sutures.

Dr. Gobrecht thought the bruised and lacerated state of the parts in these cases ought to preclude the use of stitches, as suppuration must take place. Does not think stitches of small wounds of the scalp proper; and when they are taken in large wounds, the parts ought not to be entirely closed, but a portion left open for the discharge of pus. Plasters cut broad at the ends and narrow in the middle, as in hair-lip, answer well in some cases. In answer to the President, he thought the best way to avoid deformity was by the use of adhesive straps, to approximate the parts.

Dr. Conner said the treatment must depend on the amount of contusion and other circumstances; there need not necessarily be suppuration in such wounds; the parts should be thoroughly cleansed from blood and foreign matters, brought into apposition, and sealed up, by the application of Richardson's styptic colloid.

Often this plan answers well, and healing takes place under it without suppuration. In clean cuts, sutures are called for, and he never saw any bad effects from them; does not think erysipelas is produced by them; does not like plasters to the scalp, as there is trouble in making them adhere well. Thinks fine sutures and the styptic ether, to seal up the wounds, the best plan; tying locks of hair across the wound, and saturating then with blood, answers very well.

The President (Dr. Tate) remarked that in wounds of the scalp he had been in the habit of stitching the parts, drawing the hair across the wound and saturating with collodion, though fine silver wire might be best for sutures.

Dr. Conner doubts whether the current idea that metallic sutures are less likely to produce suppuration than silk is correct: silk is more easily managed, both in application and removal.

GYNECOLOGY.

Dr. Bartholow reported a gynecological case. A lady who had been married six months, after passing two weeks beyond the menstrual period, was attacked with hemorrhage, for which her physician prescribed vaginal injections of ice-water: this was followed by severe pain, and inflammatory symptoms, which ultimately resulted in supposed pelvic abscess, as there was a discharge of pus from rectum, with relief to the symptoms. The same trouble recurred at ranging intervals for years, the abscess apparently refilling and discharging, as at first. More than a year since, she went under the treatment of an eminent gynecologist in New York, who made the diagnosis of intra-mural fibroid of the uterus and pelvic cellulitis: there remained, however, a tender tumor in the left iliac fossa. Last summer she consulted an eminent Chicago specialist, who diagnosticated fibro-cystic tumor of the uterus; and another, at St. Louis, who decided the tumor ovarian. Last September he was consulted, and found her passing several times daily, about half an ounce of purulent matter. She was emaciated and feeble. Examination revealed a fluctuating tumor in the left iliac region. Diagnosed chronic pelvic abscess, that had never been entirely emptied. With a view to accomplish the latter object, he punctured the abscess through the vagina at the most dependent part, so as to permit complete drainage: this was done with Dieulafoy's aspirateur, drawing off half a pint of fetid pus. This was followed by violent septicemia, which nearly destroyed the patient. The sac refilled, and in three months he tapped it again, with a long curved trocar, leaving the canula in. Through this the sac was washed out, and medicated fluids injected, consisting of compound solution of iodine. Increased in strength until the officinal tincture was used. The sac has collapsed and ceased to form pus; the patient has gained in weight and strength, and seems to be recovering permanently.

Dr. Stevens expressed himself as greatly interested in such cases as Dr. B. had just reported. Pelvic cellulitis in its various complications is exceedingly obscure in its pathology, and obstinate in its therapeutics. Dr. S. briefly related the features of a case of pelvic cellulitis, that had passed into his care, and which he supposed was a result of an abortion. In reply to a query—

Dr. Bartholow said he thought his case may have been a hematocele at the outset, in which the blood became decomposed and formed an abscess. He remarked on the views of Dr. Sims, on the influence of retained septic fluids in the pelvic cavity in the production of fatal results in ovariotomy and other operations. He agreed with him on this point, but did not admit his claim to originality, as the same views had been advanced by Burdon Sanderson before. He would give Sims great credit for his experiments and suggestions in getting rid of this fluid with drainage tube.

HAMILTON COUNTY (IND.) MEDICAL SOCIETY.

At a called meeting of the regular physicians of Hamilton county, Indiana, held June 7, 1873, for the purpose of organizing a county medical society, there were present Drs. A. L. and A. Pettijohn, Dr. H. H. Stout, and Dr. S. Jay, of Deming; Dr. Judd, of Eagletown; Dr. J. I. Rooker, of Castleton; Drs. P. P. Whitsell and W. H. Pontius, of Clarksville; Drs. F. M. Warford and A. R. Tucker, of Cicero; Drs. H. W. Clark, J. M. Gray, W. B. Graham, E. C. Loihr, I. Haines, and W. W. Williams, of Noblesville; Drs. F. J. Smith and E. Lamb, of Strawtown; and Dr. J. M. Barber, of Arcadia.

Dr. A. L. Pettijohn being made temporary chairman, the meeting was called to order, and a permanent organization, auxiliary to the State Medical Society, was effected, and the following officers elected for one year: *President*—H. W. Clark; *Vice President*

—W. H. Cyrus; *Secretary*—W. B. Graham; *Treasurer*—Amos Pettijohn; *Censors*—J. M. Gray, P. P. Whitsell, and F. M. Warford.

A constitution and by-laws were adopted for the government of the society, after which the meeting adjourned, to meet June 14th, for the purpose of completing the organization.

June 14, 1873.—Society again met, and continued the work of organizing.

A permanent committee on Finance was appointed by the chair, viz: Drs. J. M. Gray, W. H. Cyrus, and A. L. Pettijohn. Also, one on Ethics, viz: Drs. J. I. Rooker, T. J. Smith, and W. B. Graham.

Temporary committees on By-laws and Fee-bill were also appointed. The society at this time stands adjourned to meet on Tuesday, August 12, 1873, at 10 o'clock, A. M., in City Hall, at Noblesville, Ind.

W. B. GRAHAM, *Secretary.*

Our Weights.—Upon the average, boys at birth weigh a little more, and girls a little less, than six pounds and a half. For the first twelve years the two sexes continue nearly equal in weight, but beyond that time males acquire a decided preponderance. Thus, young men of twenty average about 143 lbs. each, while the young women of twenty average 120 lbs. Men reach their heaviest bulk at about thirty-five, when they average about 152 lbs.; but women slowly increase in weight until fifty, when their average is about 128 lbs. Taking men and women together, their weight at full growth averages about twenty times as heavy as they were on the first day of their existence. Men range from 108 to 220 lbs., and women from 88 to 207 lbs. The actual weight of human nature, taking the average of ages and conditions—nobles, clergy, tinkers, tailors, maidens, boys, girls, and babies, all included—is very nearly 100 lbs. These figures are given in avoirdupois weight; but the advocates of the superiority of women might make a nice point by introducing the rule that women be weighed by Troy weight—like other jewels—and men by avoirdupois. The figures will then stand: young men of twenty, 143 lbs. each; young women of twenty, 160 lbs. each; and so on.—*Sanatarian.*

Pharmaceutical.

CINCINNATI COLLEGE OF PHARMACY.

J. F. JUDGE, E. S. WAYNE, F. L. EATON,
Editing Committee.

Analysis of a Cure for the Habitual Use of Opium and Morphia.—Numerous advertisements from time to time have of late appeared of cures for the habitual use and abuse of opium and morphia. Several of these have come under the notice of the writer, and the remedies found to be in general as bad, if not worse, than the habit itself.

The last that has been brought to me for analysis is the extract of *Picus porteana*, so called, and must say, to me an unknown medicinal agent, and to be found only in the fertile imagination of the proprietor.

The bottle handed to me had upon it the following label and directions:

Bottle No. 1. EXT. PICUS PORTEANA.

Take a Teaspoonful 3 or 4 Times a Day.

PRESCRIBED BY DR. J. C. BECK,
No. 112 John Street, near Fourth,
Ledger, 1873. CINCINNATI, O. Page 178.

You will use the Bottles as they are numbered, using all of No. 1 before opening No. 2, and using all of No. 2 before opening No. 3, and so on. Be careful to follow the directions, and never taking more than ordered, but you take less if you can do so and feel well.

Analysis of the above extract of *Picus porteana* shows that it is merely a strong tincture of opium, slightly disguised in taste and odor by some other substance; and that it contains 8.8 grains of pure morphia in the fluid ounce—equal to about 11.7 grains of sulphate of morphia, and about double the strength of tincture of opium of the U. S. P.

Comment is unnecessary. E. S. WAYNE.

Test for Carbolic Acid and Creosote.—John A. Clark, in the *Canadian Pharmaceutical Journal* for May, says that solution of ferric chloride (or tinct. chlor. iron) furnishes a good test for the purpose of discriminating between carbolic acid and creosote—the former often being substituted in commerce for the latter: hence, this test may prove of interest to the readers of the LANCET AND OBSERVER. If sol. ferric chloride is added to an alcoholic solution of creosote, a "dark greenish-blue" coloration ensues; but, with alcoholic solution of carbolic acid, only a light brown tint is produced. He says that, by this test, one part of creosote in five hundred of carbolic acid can be detected. He further remarks, that the detection of carbolic acid in creosote is much more difficult, but it may be recognized in the following way: Boil a few drops of creosote with nitric acid (about 2 drs.), until red fumes are no longer evolved: this gives a solution which, if neutralized by solution of caustic potassa, gives no precipitate, the creosote being oxidized to oxalic acid, which, with potassa, forms a soluble salt. But if carbolic acid be treated with nitric acid in like manner, a violent reaction ensues, with production of carbazotic (picric) acid, which, when neutralized with solution of potassa, gives a yellow crystalline precipitate of carbazotate of potassa. This reaction enables us to detect even one part of carbolic acid in fifty parts creosote.

Cod-Liver Oil Mixture.—A preparation that has met with much favor, under the above name, has been made by the writer from a formula given him by Mr. Hassard of Philadelphia. It is made as follows: ℞. Fresh eggs, No. iv; lemon juice, q. s. Place the eggs in a suitable vessel, and pour over them sufficient lemon juice to cover them, and let the whole remain for 24 or 48 hours. Then pass the whole through a strainer, and add, with agitation, the following, and in the order given: To the lemon-juice and eggs add an equal volume of honey, cod-liver oil, and brandy or whisky. The whole forms a permanent emulsion, and will keep good during the summer months for a month, and longer in cooler weather. The taste of the oil can be completely covered by the addition of a few drops of oil of wintergreen, or oil of bitter almonds. This mixture is pleasant to take, and a valuable therapeutic agent.

P. S.—Glycerine may be substituted for the honey. E. S. W.

Syrup of Borax.—℞. Borax, ʒiv; syrup Simp., ℥x. Dissolve by the aid of heat. For laryngeal catarrh, a teaspoonful to be taken from 7 to 10 times a day, and swallowed without dilution, and avoiding to drink immediately after, so as to prolong the contact of the remedy. E. S. W.

Selections.

Elongated Prepuce as a Cause of Impotency. BY A. A. O'NEIL, M. D., Professor of Anatomy, University of California.—Probably in the whole category of human ailments there is not a difficulty which gives greater cause for complaint, or renders the subject more mentally depressed, than any disease of the generative organs, particularly when such disease consists of impairment of function to such an extent as to constitute impotency. And the knowledge that they are so afflicted bears with such force upon their minds as to cause them to feed with avidity on the charming allurements presented by charlatans through the columns of the daily press, and, in this manner, they become the spoil of quacks, who hold out tempting offers of cure as long as golden offers are held out. After having run the gauntlet, and frequently exhausted their purse, they seek the advice of some regular practitioner. Now, I know of no patient so hard to treat, so difficult to manage and convince that you are giving all the attention and consideration which he thinks his case demands. The medical attendant, frequently having neither time to waste nor inclination to secure the confidence of the sufferer, neglects to give him that moral medicine—the result of conversational powers on the part of the physician, and many times of as much importance as drugs and chemicals.

Impotency has its origin in many causes, and its treatment, to a certain extent, depends upon its cause. The variety I propose to speak of, and which I find most prevalent, affects usually young men from twenty to thirty years of age, married as well as single, and manifests itself by imperfect erections, and that frigidity which, by force of an immoderate ardor, seizes the individual even in the very lap of fruition, or, at best, when coition is attempted, an almost instantaneous ejaculation of semen, thus violating some one of the indispensable conditions for the perfection of the procreative act; namely, erection, intromission, and ejaculation.

Some years ago I was annoyed by the frequency of cases of this character, which I treated according to established rules—tonics, cauterization, etc.; but with no favorable results. The spermatic fluid could evidently be produced in abundance; for where a primary attempt was succeeded by premature discharge, a subsequent essay would terminate in a similar manner, to the complete disgust and intense mortification of the individual. I was struck by the circumstance that, in all cases the prepuce nearly, or entirely, covered the glans penis, and in some, indeed, there was phimosis. In the latter, supposing that perhaps the impotency depended upon the contraction preventing the proper filling with blood of the *corpora carnosa* and *corpus spongiosum*, I performed the operation of circumcision, and with the effect of restoring the virile power of the patient. In the cases of perfectly retractile prepuce, I determined to operate likewise, not indeed believing the exposure of the highly sensitive papillæ of the glans to the walls of the vagina caused the premature ejaculation; for my idea then was, that the internal layer of the prepuce, more delicate in structure than the walls of the vagina, so correctly adjusted and accurately imposed upon the sensitive papillæ of the glans, as to cause titillation and discharge by the very act of erection; and this I believe to be the frequent cause of nocturnal emissions.

The first case I operated upon proved, at least to my satisfaction, the truth of my reasoning.

A man of twenty-five years of age, who had been impotent for three years, applied to me for treatment. I circumcised him by the usual method, and, on the sixth day, removed the satures, when, without my knowledge or consent, and notwithstanding the fact that the wound was not completely healed, he determined to experiment; and the next day came to my office with the skin torn from around the glans, and requiring to be restitched to heal by second intention. But he informed me the adventure had been attended with complete success, and he did not care for the extra pain brought on by his importunate haste. My sympathy in his success made me lenient in my counsels. In his case it could not have been hardening of the glans, for the time was too short; besides, for six weeks after the operation, he was forced to keep the extremity of the penis covered with lint, so sensitive was it. Since inaugurating this treatment, I have operated on thirty-seven cases, all of them resulting favorably, always selecting such cases as, I suppose, have their origin in this difficulty. In two of the cases operated upon, the prepuce had been split upward in one by a surgeon for phimosis; in the other, the same operation had been performed by striking against the pommel of a saddle. The majority of these cases had been the patients of several physicians, and, consequently, received the medication usual in such disease, but without avail.—*Western Lancet.*

Advantages of Circumcision from a Surgical Point of View.—Dr. Cadell read a paper on this subject before the Med. Chirurg. Soc., Edinburgh. He considered it in four aspects: 1. In infancy. 2. In Boyhood. 3. In adult life. 4. In old age. He described:

1. The local and constitutional disturbance which may be set up by a long prepuce in infancy, and showed how these might be immediately relieved by circumcision. He read notes of a case, and also referred to those of Mr. Bryant, illustrating the effects of an adherent prepuce on the urinary organs, and the relief obtained by circumcision.

2. In boyhood, he believed that a long prepuce, by imprisoning the secretion from the glans, might be an exciting cause of masturbation; and if there was an hereditary disposition to nervous affections, epilepsy and insanity might be thereby induced.

3. In adult life, circumcision would facilitate cleanliness, diminish the secretion from the glans, so that the great cause of non-venereal excoriation would be removed, and thus render the mucous surface less susceptible to the venereal poison.

4. In old age, he cited Mr. Hey's opinion, that a congenital phimosis was an exciting cause of cancer in the penis.

In conclusion, Dr. Cadell remarked that he would strongly recommend circumcision in boys between infancy and puberty, whenever a congenital phimosis caused them the slightest inconvenience.

Prof. Lister said the cases alluded to by Dr. Cadell, of irritation caused by adherent prepuce, must be admitted to be of great interest. They knew that where adhesion existed there was often an accumulation of secretion, and they could understand that to be a cause of irritation. He should like to have it clearly brought out how far the symptoms in these cases were attributable to that cause, as distinguished from mere length of the prepuce. Though all would allow that cases of phimosis ought to be subjected to operation, it ought to be considered whether circumcision was the best that could be done. The object could be obtained without mutilation. Mr. Jordan, of Birmingham, has written an interesting paper on the subject, showing that a perfectly natural condition of things might be obtained by the simple means of notching the ring of skin to the requisite extent, and then dividing the mucous membrane up to the *corona glandis*, and, avoiding all use of stitches, simply have the part drawn backward and forward twice every day. As regards the question of malignant disease, he might have been unfortunate, but he had now seen a large number of cases of cancer of the penis, not one of which was associated with the phimosis.

Dr. J. Bell said his experience in regard to circumcision was in cases of long standing, and perfectly incurable nocturnal enuresis by small children who were in the habit of wetting the bed. In as many as four or five cases he had succeeded in effecting a perfect cure, by simply removing the rebundant portion of the prepuce. In one case, a very bad case, a poor little fellow made his water first in the prepuce, which was like an orange at the end, and then he got rid of the water by squeezing it with his hand, the water coming out by an small aperture. That case was in George Watson's Hospital, and it became a question with the managers how to provide the necessary bedding for the boy. The operation performed was very simple, and was a complete cure. He (Dr. Bell) had very little experience of adherent prepuce; cases of adhesion of the prepuce were not so common as those of long prepuce.

Dr. Halliday Douglas said, that several years ago he was waited upon by a gentleman who had been married a few days before, and who had failed to effect connection. He was laboring under a very tight phimosis. He had never experienced any inconvenience during his life of twenty-five or twenty-eight years. He (Dr. Douglas) transferred him to Mr. Syme's hands, and, within twelve months, there were twins born to him. Another curious fact in this gentleman's history was this: In early life his brother had been relieved of phimosis, and three of his children, nephews of the first gentleman, had required to have the operation performed.

Dr. Watson was glad that the conclusion to which Dr. Cadell had arrived was, that where an elongated prepuce was a source of annoyance, it was right to relieve the person by removing it. As regarded the question of the comparative frequency of venereal complaints among persons who had been circumcised and those who had not, he might refer Dr. Cadell to a paper which appeared in the *Medical Times and Gazette*, 1st of December, 1855, by Mr. J. Hutchinson, in which it was shown that at the Metropolitan

Free Hospital, situated in the Jews' quarter, in London, in the year 1854, the proportion of Jews to Christians among the out-patients was as *one* to *three*—at the same time, the proportion of cases of syphilis in the former to the latter was only as *one* to *fifteen.* Yet, that this was not the result of any higher degree of morality on the part of the Jewish population was obvious, because fully one half of the cases of gonorrhœa occurred in Jews. This preventive influence of circumcision, as regards chancrous infection, led to hereditary syphilis being rarer among the children of Jews than of Christians. . . . . He was surprised that Dr. Cadell did not quote that greatest of all authorities on such matters, viz., Dr. Ricord, who had said, in one of his published clinical lectures: "The prepuce is an appendix to the genital organs, the object of which I could never divine; instead of being of use, it leads to a great deal of inconvenience, and the Jews have acted kindly in circumcising their children, as it renders them free from one at least of the ills to which flesh is heir. The prepuce is, in fact, a superfluous piece of skin and mucous membrane, which serves no other purpose than as a reservoir for the collection of filth, especially when individuals are inattentive to cleanliness." This was very strongly confirmatory of Dr. Cadell's views, though it appeared to Dr. Watson a little extreme.—*Edin. Med. Journal, Feb.*, 1873.

When to Lance the Gums.—Dr. J. L. Smith says, in his late work on "Diseases of Infancy and Childhood:" "The gum-lancet is now much less frequently employed than formerly. It is used more by the ignorant practitioner, who is deficient in the ability to diagnosticate obscure diseases, than by one of intelligence, who can discern more clearly the true pathological state. Its use is more frequent in some countries, as England, under the teaching of great names, than in others, as France, where the highest authorities, as Rilliet and Barthez, discountenance it.

"It is well to bear in mind, as aiding in the elucidation of this subject, the remark made by Trousseau, that the tooth is not released by lancing the gum over the advancing crown. The gum is not rendered tense by pressure of the tooth, as many seem to think; for if so, the incision would not remain linear, and the edges of the wound would not unite, as they ordinarily do by first intention within a day or two. This speedy healing of the incision, unless the tooth is on the point of protruding, is an important fact, for it shows that the effect of the scarification can only last one or two days. The early repair of the dental follicle is probably conservative so far as the development of the tooth is concerned. It may help us to understand how active, how powerful, the process of absorption is, if we reflect that the roots of the deciduous teeth are more or less absorbed by the advancing second set, without much pain or suffering from the pressure. If the calcareous particles of the teeth are so readily absorbed, what is the foundation for the belief that the fleshy substance of the gum is absorbed with such difficulty? Too much importance has evidently been attached to the supposed tension and resistance of the gum in the process of dentition.

"Follicles in the period of development are especially liable to inflammation. We see this in the follicular stomatitis and enteritis so common when the buccal and intestinal follicles are in the state of most rapid growth. Does not this law in reference to the follicles hold true of those by which the teeth are formed, so that the period of their enlargement and greatest activity, which corresponds with the growth and protrusion of the teeth, is also the period when they are most liable to congestion and inflammation? This fact affords a better explanation of the frequency of the so-called laborious or difficult dentition than that it is due to the resistance which dental evolution encounters from the gums.

"If there are no symptoms except such as occur directly from the swelling and congestion of the gum, the lancet should seldom be used. The pathological state of the gum, which would, without doubt, require its use, is an abscess over the tooth. As to symptoms which are general or referable to other organs, as fever and diarrhea, the lancet should not be used if the symptoms can be controlled by other safe measures. All co-operating causes should be removed, when, in a large proportion of cases, the patient will experience such relief that scarification can be deferred.

"If the state of the infant is such that life is in danger, as in convulsions, or there is danger that the infant will be permanently injured or disabled, as by paralysis, every measure which can possibly give relief, should be employed without delay. In these dangerous nervous affections, therefore, the gums, if swollen, should be lanced. I know no accidents of dentition which require prompt scarification except suppurative inflammation of the gums, convulsions, and paralysis. In other cases, the operation may be safely postponed till other measures have been employed."

Wernich on an Additional Effect of Ergot, of Importance to the Obstetrician.—The results of a large number of experiments, and the frequent mention of a "distended bladder," occurring in the reports of post-mortem examinations, show that the fullness of the bladder found in patients under the influence of ergot, is not merely an accidental concomitant of the exhibition of this drug. The explanation of this does not seem far to seek, since the strongly irritant action of the preparations of ergotin upon the sphincter vesicæ is not only a recognized fact, but one that is frequently availed of in therapeutics, in paralysis of the sphincter muscle after typhus, in wetting the bed in children; in the incontinence of the aged, due to simple weakness of the sphincter; in the paralysis of the same muscle in those suffering from paraplegia, etc. But from the circumstance that in animals used for experiments to determine the action of ergotin upon the uterus, in which the bladder, from motives of convenience, had been previously emptied, but yet soon after the administration of the drug was found full of urine, we suspected that, in addition to spasm of the sphincter, there was still another effect produced by the ergot. This suspicion was strengthened and brought almost to a certainty by the repetition of the same phenomena almost without exception; and, without going into the question whether the increased blood-pressure, caused by ergotin, is enough to account for the phenomena observed, Wernich feels justified in stating, in opposition to Drasche, that the fullness of the bladder observed after the administration of ergot, is due, not only to a retention of the normal amount of urine, but also to an increased amount of secretion of that fluid.

Two cases are adduced by Wernich in illustration of his views. The first was a primiparous woman in labor with twins. After the birth of the first, the bladder emptied itself spontaneously; the os uteri was fully dilated, and the head of the second child presented, but owing to a cessation of labor-pains, ergot was given at intervals of half an hour during the next three hours. The uterus contracted fully, but the head did not advance. At the return of the doctor the bladder was found very full. It was emptied, and almost immediately the child was born

The second case was also a primiparous woman, in whom there had been a complete cessation of the pains for some hours; and, as the patient and her friends had a great dread of the forceps, recourse was had to ergot, given in the same dose and at the same intervals as in the previously described case. After the second dose the pains came on, gradually increasing, but by the end of the second hour had not caused the head to advance. The bladder was seen to be greatly distended, and by means of the catheter a large amount of clear urine was drawn off, and at once the head advanced, the forceps were applied, and a male child of normal size extracted.

This is scarcely a matter for the obstetrician, as at all events, before any operative interference, the bladder would be examined; but it is worthy the attention of the assistants of the lying-in woman.

It would be advisable for them to use the catheter after a prolonged ineffectual administration of ergot, as it is quite possible that in many of these cases in which want of power has been attributed to the drug, a contrary verdict would have been rendered had the precaution to relieve a distended bladden been observed. —*Phila. Med. Times.*

How to Cure a Cold.—The whole fraternity of editors, and all of their readers, owe a debt of gratitude to one of their members, the editor of the *Danbury News*, for a report of the following case, instituted, though not practiced by himself, but by one of his corps. Treatment: He boiled a little boneset and horehound together, and drank freely of the tea before going to bed. The next day he took five pills, put one kind of plaster on his breast, another under his arms, and still another on his back. Under advice from an experienced old lady, he took all these off with an oyster-knife in the afternoon, and slapped on a mustard paste instead. His mother put some onion drafts on his feet, and gave him a lump of tar to swallow. Then he put some hot bricks to his feet and went to bed. Next morning another old lady came in with a bottle of goose-oil, and gave him a dose of it on a quill, and an aunt arrived about the same time from Bethel, with a bundle of sweet fern, which she made into a tea and gave him every half-hour until noon, when he took a big dose of salts. After dinner his wife, who had seen a fine old lady of great experience in doctoring, on Franklin street, gave him two pills of her make, about the size of an English walnut and of a similar shape, and two tablespoonfuls of home-made balsam to keep them down. Then he took a half-pint of hot rum, at the suggestion of an old sea-captain in the next house, and steamed his legs with an alcohol bath. At this crisis two of the neighbors arrived, who saw at once that his blood was out of order, and gave him half a gallon of spearmint tea and a big dose of castor oil. Before going to bed he took eight of a new kind of pill, wrapped about his neck a flannel soaked in hot vinegar and salt, and had feathers burnt on a shovel in his room. He is now thoroughly cured, and full of gratitude.—*The Sanitarian.*

Three Cases of Amenorrhea resulting from Undeveloped Uteri.—Dr. Wm. H. Baker reports the following cases:—

I. The patient was unmarried and 20 years old. The menses were irregular, having occurred only six times. The flow was then scanty and accompanied with pain. She was anemic and hysterical, but was well developed in every particular except the uterus, which was small, the probe passing but one and a half inch. Sponge tents were first used, and Thomas' intra-uterine galvanic pessary was then worn for a month, but the flow did not appear, probably owing to the marked anemia. The uterine cavity increased to two and a quarter inches.

II. The patient was 19 years old, unmarried. The menstrual flow was irregular, continued for only a few hours, and for five months preceding her entrance into the hospital had not appeared at all. The probe passed but one and seven-eighths of an inch to the fundus of the uterus. A sponge tent was first introduced each week for three weeks. A current of electricity from the secondary coil of an electro-magnetic battery, strong enough to produce a decidedly prickling sensation, was applied—one electrode over the lumbar region of the spine, the other to the interior of the uterus. The application was continued ten minutes, and repeated three times a week. The flow returned regularly, and at the end of three months the probe passed two and a half inches.

III. The patient was 24 years old, unmarried. The breasts and genital organs undeveloped; the probe passed one and a quarter inch to the fundus uteri. The menses ceased after a severe attack of sickness when 14 years old. Sponge tents, and subsequently one of Thomas' galvanic pessaries, were used with no benefit. An electrical current was then employed as in the preceding case; the uterus gradually developed; and after three months, menstruation followed, but the flow ceased after the second day. "A current of electricity from eighteen cells of Kidder's battery was applied, and continued four minutes, its course being occasionally reversed.

For five hours after its application the patient felt perfectly well; she was then suddenly taken with faintness, exhaustion, and had every indication of a great nervous shock. Stimulants were at once ordered. The flow began again immediately and continued twelve hours. Ovulation had evidently taken place."—*New York MedicalJournal, June*, 1873.

Crystallized Digitaline.—The directions given by M. Brugnet for preparing pure crystallized digitaline are as follows: The drug is exhausted with fifty per cent. alcohol, the alcohol recovered by distillation, and the residue concentrated to a weight equal to that of the digitalis originally used. This concentrated extract holds in solution the digitaline; but on dilution with three times its weight of water, it deposits nearly the whole of this principle in an impure state, but free from the digitaline and other soluble principles, which interfere with the crystallization of the digitaline. The deposit is dried and extracted with twice its weight of boiling proof-spirit, which dissolves the digitaline. As the solution cools it deposits crystals, which continue to form till the liquor exhausted. The digitaline is separated from the digitine by extraction with chloroform, and, after treatment with animal charcoal, is recrystallized from boiling alcohol.

Crystals thus procured are fine, white, shining needles arranged in stellate clusters. They are intensely bitter, give a wonderfully intense emerald-green coloration with hydrochloric acid, and produce the peculiar physiological effects of digitalis in extremely minute doses—$\frac{1}{520}$ of a grain.—*Med. Press and Circular.*

A Case of Precocious Menstruation.—Dr. Clark was called to see a little girl who, soon after completing her fifth year, complained to her mother of pelvic pain, with the usual symptoms of approaching menstruation. She soon had a sanguineous flow, which continued for three days and then ceased. As the child was in apparent good health, no medication seemed necessary. The doctor regarded it as a hemorrhage produced by some strain or injury that would not recur, but it has continued regularly once in twenty-eight days ever since. She is not precocious in any other respect, or large of her age; but the usual change in form suited to a young girl fifteen or sixteen years of age has taken place, so that she looks like a little woman. An aunt of the child commenced to menstruate regularly at six years of age, and continued to do so until she was thirty-eight.—*Boston Med. and Surg. Journal.*

Translations.

Albuminous Expectoration Consecutive to Thoracocentesis.

[Gazette Hebdomadaire, No. 30, 1873.]

Translated by B. F. Miller, M. D., Cincinnati.

This is the title of a very interesting thesis sustained March last by Dr. Terrillon, prosector to the hospitals.

In 1863, Dr. Pinault also had called attention to this subject. Facts analogous have been pointed out since by MM. Despine, Woillez, Marotte, Béhier, Hérard, etc. Dr. Féréol some time since took up this subject before the society of the hospitals, adding to it some ingenious considerations upon pleuro-bronchial perforations without pneumothorax. We believe it expedient to return to this, and examine the different opinions which are produced by this occurrence.

It is ordinarily in consequence of thoracocentesis, performed in conditions wholly simple, that the accident is produced. After an interval varying from a fourth to several hours, the patient is attacked with increasing dyspnœa, and expectorates a greater or less quantity of yellow liquid, ropy and frothy. This quantity is very variable, and reaches two or more litres. According to M. Terrillon, three clinic forms may be admitted: a light form, characterized by little dyspnœa and slight expectoration; an intense form, in which the dyspnœa is active, the expectoration considerable, the cough distressing, the symptoms have a regular progress, and last several hours or even days. In a third grave form, there is suffocation. The liquid escapes abundantly at first; afterward, the bronchia and trachea are incumbered, the dyspnœa reaches its climax, a true asphyxia occurs, and the patient rapidly sinks. Our colleague has observed this fatal termination in two cases only, out of the twenty-one observations which he has collected. The development is entirely different in the first two forms. The expectoration in the light form is often transient, and disappears during the day. It may, in the intense form, prolong itself for several weeks, repeating itself after each puncture.

The characters of the liquid expectorated are interesting to know. It presents a yellow color, and, when allowed to repose, disposes itself into three successive layers: one layer of very abundant, persistent froth; a yellow liquid layer—sometimes transparent, at other times being changed by its being mixed with saliva. A third layer forms, at the bottom of the vessel, a deposit in which the microscope, especially, detects epithelial cells, white, and some blood-globules. Treated with azotic acid, this liquid gives an abundant albuminous precipitate. Acetic acid equally gives a precipitate of mucine, due to the presence of bronchial mucus. But the characteristic is the albuminous precipitate, which never exists in the liquid of simple bronchorrhea.

In the cases where the albuminous expectoration has been observed, it is a matter, almost always, of acute abundant effusion. The operations of thoracocentesis have been done in the best conditions. A circumstance, however, has been noticed, and appears to us to have a capital importance. It is the question of the rapidity with which the chest has been entered. In most of the observations (Terrillon) one notes that the pleura has been rapidly debarrassed, and that the effusion has been, as speedily as possible, completely arrested.

What is the source of this albuminous liquid? Several explanations have been proposed. The first which has in a manner offered itself, is the passage of the pleural liquid into the bronchia, through the perforation made by the trocar. This view has been sustained by MM. Woillez and Marotte. The first even considered the albuminous expectoration as a positive sign of perforation. He concludes that the lung is wounded more frequently than it is generally believed to be, since it is often latent and without untoward accidents; and that it may be indirectly recognized by searching for the presence of albumen in the expectorated saliva. (Maladies Aiguës des Organs Respiratoires, p. 471.)

This opinion is difficult to admit to-day, in the presence of facts better known. In the first place, the observations of albuminous expectoration related themselves, for the most part, to cases where the abundance of the liquid did not allow the instrument to reach the lung; and when one has employed capillary trocars, whose points might have been retired, one can not admit that the lung has been perforated at the end of the operation, at the moment when it dilates itself and may encounter the instrument. In the observations of M. Béhier, particular precautions have been taken. The trocar was introduced only four centimetres. The point was retracted. At the autopsy, one recognized in the most undoubted manner that the lung had not been touched.

One other objection may be drawn from this fact, that the bronchial expectoration takes place only a fourth or a half hour after the operation is ended, when the pleura is about emptied, and when the liquid expectorated may surpass in abundance what was evacuated. It would be necessary then to admit that one has left a considerable quantity of liquid in the pleural cavity, or that this liquid may reproduce itself in a very short time. The results given by percussion do not allow this hypothesis.

Besides, one knows the consequences of the puncture of the lungs: issue of some drops of blood, expectoration more or less bloody, acute pain experienced by the patient—sometimes a pneumothorax. Have any of these symptoms ever been indicated?

A final objection remains, which to us appears peremptory. The albuminous expectoration may exist in a purulent pleurisy. This is what happened to a patient, the observation of which has been related by Dr. Louis Laude (*Gazette Medicale de Bordeaux*, 20 *Juillet*, 1873). The effusion was composed of creamy pus, and in two repetitions the thoracocentesis, performed according to the Dieulafoy plan, was followed by an abundant albuminous expectoration.

One can then reject the explanation by the lung puncture. Is it necessary to search for it in a spontaneous perforation?

It appears incontestable that the pleuro-bronchial perforation—that which is performed upon the pleura, near the bronchia—may exist without pneumothorax. Dr. Féréol has published an interesting fact: In the pleurisy of children, where the liquid has escaped by the bronchia, the absence of pneumothorax is the rule, according to Dr. Barthez. Durosiez communicated an observation of this kind to the Medical Society of Paris (1870).

We at first remark how these facts of spontaneous perforation without pneumothorax are rare, outside of purulent pleurisy. In admitting them in the serious pleurisy, we comprehend, with M. Moutard-Martin, that the absence of pneumothorax can be explained in these cases by the slowness with which the effusion escapes; the fullness alone being evacuated, and the pleura finding itself always in a state of tension sufficient to evade the entrance of air.

But the conditions are very different, in consequence of a thoracocentesis, especially when the pleura has been almost voided. Above all, it is at the time when the void produces itself—when the violent efforts to cough have taken place—that the perforation may have occurred; or, it is always at a moment more or less distant from the operation that the albuminous expectoration is observed. (M. Moutard-Martin quotes an observation of spontaneous perforation of the cell-wall.) Or, the accident has taken place at the end of the *thoracocentese*, during the efforts at cough, at the exact physiological moment, and an hour after the operation, when all the aspiratory movements were suspended.

It is not then absolutely rational to conclude, with Dr. Féréol, in the identity of the mechanism of perforation, in the effusions from punctures, or abandoned to themselves. Let us remark that it does not become a matter here only to explain the albuminous expectoration which follows in the thoracocentesis, and that M. Féréol insists only upon these conditions of the perforation without pneumothorax, to legitimatize a hypothesis so strange, in which he makes of the pulmonary parenchyma in pleurisy a sort of felt, inert sponge, which becomes mechanically permeable to the liquid. In traversing this new filter, the nature of the liquid may even modify itself. Then it only becomes necessary to admit a perforation to recognize the absolute identity of the two liquids —that of the pleura, and that of the expectoration. These are pure hypotheses; the author recognizes it himself. Ingenious as they may be, they rest upon no demonstrated facts. Why then this formation of the pleural felt? Would it be so rare in pleurisy? Or should we admit that it is the usual mechanism of resorption of the pleural liquids?

It appears to us that it is not necessary to go to seek so far, even in good company, an explanation whose novelty seems to us its principal merit.

We hold in view the last opinion put forth by M. Hérard before the Academy of Medicine (Juillet, 1872). When a lung has been compressed for a certain time by a liquid, and that it regains in consequence of the evacuation of this liquid its normal dimensions, there takes place in this organ a sort of serous or sero-sanguinous growth, which may give birth to a certain quantity of serosity which will be expelled by the bronchia.

This explanation was proposed in 1853 by M. Pinault. It has been revived and defended with force by M. Moutard-Martin, in the last discussion. It is supported upon facts of experimental physiology. It is known that the section of the pneumogastric nerve determines the presence of a frothy effusion into the bronchia, and a sanguinary engorgement into the pulmonary tissue.

Longet insists upon the characters of the effused liquid. He demonstrated that it is composed of two parts: bronchial mucus, and serosity. This serosity has its origin in the congestion of the parenchyma, itself consecutive to the paralysis of vessels.

Niemeyer equally admits that in pulmonary hyperæmia there is produced a liquid and serous-alveolar transudation, very different from bronchial mucus, properly called.

According to Jaccoud, pulmonary œdema results from a serous exudation in the walls and upon the free surfaces of the alveoli—natural consequence in all pulmonary congestion of a certain duration.

In his "Treatise of the Fluids," M. Rolin recognizes that, under the influence of congestion, the capillary radicals upon the surface of the alveoli may permit a certain quantity of liquid to exude, entirely different from the bronchial mucus. In a lung for a long time removed from its natural excitement, a little brusque atmospheric air will determine a primitive excitation of the vessels, which will be followed after some time by a true paralysis. There will necessarily result a passive congestion, with œdema. The time which intervenes between the evacuation of the liquid and the production of albuminous expectoration comes to support this explanation. It is not even necessary to admit, with M. Moutard-Martin, an epithelial desquamation of the alveoli, very possible at first, and which renders still more probable the fact of the transudation of sero-albuminous liquid.

This explanation appears to us, then, legitimate—better founded, in all cases, than those which we have exposed. We believe that a practical result may follow this discussion. Most of the doctors who are specially occupied with thoracocentesis insist upon the utility of a slow and incomplete evacuation. They dread to determine rapidly a considerable void in the pleural cavity. The best means to avoid the accidents will be, perhaps, to evacuate only in the first operation a part of the effusion; to renew the operation at intervals of one or several days; to watch over the transition, and void the pleura at several times;—nothing being more practicable in the new processes of thoracocentesis.

DEATH FROM INHALATION OF CHLOROFORM.

By W. H. MUSSEY, M. D., Professor of Surgery, Miami Medical College.

Adolph Hummler, cooper, aged 29, German by birth, called on me August 6, with the terminal phalanx of right thumb hanging by a slight thread of skin on the dorsal aspect, having received an injury that exposed the next phalanx. As there was too much mangling of the detached portion to admit of osteoplasty, I proposed to dissect back the integument, and remove a sufficient portion of the protruding bone to make a good stump.

The patient insisted upon inhaling chloroform, notwithstanding my unwillingness to give it, as the operation was a slight one, and as I had no assistant then in the office; but I yielded to his entreaties, gave to him two ounces of brandy in water, and commenced the administration of the anæsthetic at about five minutes before noon. The patient took it satisfactorily for two minutes, when my nephew, Dr. R. D. Mussey, came in, and I resigned the further administration into his hands. Soon, the patient stated to his brother, in the German language, that "they were making him drunk," and immediately commenced to struggle and slide down on the couch on which he was lying. The chloroform was removed, and the patient replaced in his former position, at which moment he had a convulsion; the skin of his chest, neck, and face became purple, and the breathing profoundly stertorous. As the clock struck the noon hour, the breathing ceased.

I immediately instituted artificial respiration, by inflating the lungs from my own, and by pressure upon the chest,—every other filling of the lungs being from the air of the room. I placed forceps upon the tongue, and drew it out, though there was no obstruction to the ingress of air, nor was there the dropping back of the tongue. For six or seven minutes I persisted in this method of artificial respiration, when I determined to make use of galvanism, and directed Dr. R. D. Mussey to make ready the constant-current battery, and myself prepared the Faradaic battery. The first-named current was applied to the phrenic nerves, the current being broken every two and three seconds, regularly and irregularly; then the negative electrode was applied to the phrenic nerves, and the positive to the diaphragm. Then the Faradaic battery was applied to the positions above named, and artificial respiration maintained by strong pressure of the electrode over the region of the heart, and its sudden removal. This was satisfactory, so far as its action was concerned, and was continued five minutes. Not perceiving any beneficial results from this process, inflation of the lungs was repeated, and this form of artificial respiration was tried for a few minutes. All efforts proved unavailing, and, after persisting about twenty minutes in our attempts to resuscitate, we were compelled to admit that the man was dead.

By order of the coroner, at 8½ P. M. an autopsy was made by H. A. Clark, M. D., an entire stranger to me, who politely invited me to be present. N. P. Dandridge, M. D., Pathologist Cincinnati Hospital, "assisted" in the autopsy, by making the entire dissection with his usual celerity.

After the taking of testimony, August 7, this record of the autopsy was presented by Dr. Clark:

"CINCINNATI, *August* 7, 1873.

"In compliance with the request of Dr. P. F. Maley, coroner of this county, I made a post-mortem examination of the body of Adolph B. Hummler, at the corner of Abigail and Main streets, at 8½ o'clock P. M., on the 6th instant. The body presented a healthy appearance; was well-formed, and in good condition. The thumb of the right hand was nearly severed by a lacerated wound just above the last joint, being merely held by a piece of skin. There was a contused wound of the temple, just above the outer corner of the right eye, and involved only the skin. There was the mark of another contused wound on the right side of the head, above the ear. These wounds of the head had produced no obvious effect upon the brain. Upon opening the body, the lungs were found slightly congested, but otherwise healthy. Mucous membrane of windpipe slightly reddened. The heart was found empty; left ventricle contracted, right ventricle flaccid. All the valves were perfectly normal. The blood was in a fluid condition; stomach, liver, and intestines healthy. The kidneys were uniformly congested, but not to a very marked degree; other urinary organs healthy. The brain, with its membrane and arteries, presented no abnormal appearance. The quantity of cerebro-spinal fluid was larger than usual.

"H. A. CLARK, M. D."

In the testimony before the coroner's jury, the wife says: "We were married eight years. My husband was a temperate man; drank five or six glasses of beer daily since our marriage." The next witness, Joseph Siefert, testified: "I have known deceased three years; he drank whisky every morning regularly; he was a temperate man."

I submit, if the admission of the wife to the daily use of five or six glasses of beer, and, by a boon companion, of a drink of whisky every morning, does not justify the inference that the deceased was a genuine soaker, and used much larger quantities than his wife knew of.

The last-named witness told me, privately, that Hummler fell through a hatchway two or three weeks ago, and struck upon his head, "when he had too much on;" that he had not been really well since; and that, in handling some tools, he accidentally struck his face, over the external orbit of left eye. How much injury to the brain these external blows may have caused, is not clear. They may have had important relations with the causes of death.

In the autopsy, there was noticed, on the opening of the dura mater, an unusual quantity of serum—one ounce, I should think; also, under the arachnoid there was a preternatural quantity, though there was no unusual redness present. The skull was one-third of an inch in thickness, of uniform density, (no diploe,) very much like a syphilitic hypertrophy. There was decided congestion of the kidneys.

The administration of the anæsthetic was by putting a sponge into the mouth of a one-ounce phial, and shaking a dozen drops at a time upon one thickness of a linen handkerchief held loosely over the face; and only one-third of an ounce of chloroform was used.

The choroform caused the death. The ultimate conditions preparing the patient for the fatal issue are matters of speculation. Without doubt, alcoholism had its part of the responsibility. Natural or acquired idiosyncracies may be supposed. The patient died with *coma*, an unfrequent form of death from anæsthetics; in most cases there being asphyxia or syncope.

I have administered anæsthetics for a period of twenty-eight years, as often as any one in full practice,—with one fatal result. How many have administered opium or its compounds,—veratrum, alcohol, and other poisonous drugs,—to the same extent, and have had but ONE death from the article administered?

Editorial.

The Concours.—Many years ago, I asked a friend how anybody or set of bodies could manage to get up the necessary amount of material for a daily paper. My friend chuckled at my innocent simplicity, and then asked me candidly if I had ever read with half an ear to criticism those voluminous morning leaders. Time after time we feel the force of our friend's idea as we read the platitudes of various medical journals that come to our table. The latest of these is a three-column editorial in the *Philadelphia Medical Times.* The editor seems in a very unhappy frame of mind from some reason, all, however, growing out of *concours*, but particularly, as we infer, because of unworthy local appointments. Quite a number of our friends have possibly been surgeon to some ship that enabled them to take free passage to "Paree," and thenceforward nothing is good in America. "They do these things better in Paris," you know. We are free to admit that examination by some plan equivalent to the system of concours affords the best evidence of mere technical completeness of scholarship. This remark applies to residents in hospitals, to surgeons and physicians, to hospitals, as also to all places of medical trust and appointments. There are two extremes in this matter: To appoint by absolute authority of trustees suggests nepotism and favoritism; to appoint by concours, implies *technical accuracy*, but by no means implies *fitness*, in the various qualities of morals, and practical personal adaptation. So that, as we have before expressed the opinion, either extreme has its serious objections. For all the appointments of internes to hospitals in this city, the candidates are subjected to a rigid examination by concours, but in addition they are also made the subjects of a careful enquiry as to personal qualites. We think this combines about as near completeness as can well be reached. Whether any system of concours can be made practically available for staff appointments and professional place, in this country, is not very clear to us. We believe it was Dr. Pattison, who when about to give his trial lecture as a candidate for professor of anatomy, declined to select a theme beforehand; but went into the amphitheater, and then requested a topic to be selected for the occasion.

Vermont Medical Ethics.—"Richard is himself again!" Having become convinced that "kissing goes by favor," *Doct. T. E. Powers* is again determined to try his luck among the Æsculapians of *Woodstock*, and to stick by the stuff, until poverty shall drive him from the land. All calls, whether from the high or the low, the rich or the poor, shall meet with prompt attention. Influenced by no sectarian motives, void of conscience easily swayed by religious faction, the tool of no particular church, he looks to that generous public who have so long delighted to honor his ancestry—upon whose liberality he relies for support,—desiring their patronage no farther than merit alone shall entitle him. Although he may not be honored by the high sounding title of Professor, or be dubbed with the magical appendage of F. R. S. or "A. S. S." yet the jump of the toad can never be accurately measured by the length of his tail. Residence a few rods east of the jail, at the house of *Joseph Churchill.*

WOODSTOCK, VT., *April* 26, 1833."

The above notice appeared in a secular paper in one of the most flourishing towns of Vermont, when one of its most skillful physicians commenced practice. Success followed.

College Matters.—We have received a large number of college announcements. They are as usual the good promises, and successful results of the year past. Amongst these we note only the circular of our Cleveland friends, in which we find two lady matriculants. In the catalogue of the Medical Department of Syracuse University we find the names of several lady attendants. In all these cases we find no disturbing element has been introduced. In other words, these schools accept the situation. If women wish to study medicine, they say let 'em. If they become properly qualified, graduate them, if they conduct themselves correctly, recognize them,—that's all.

Hartford Retreat for the Insane.—We are under obligations to Dr. Gurdon W. Russell, of Hartford, for the Forty-ninth Annual Report of this excellent institution. In addition to the usual statistical and general information as to the workings of the Retreat, we find some special matter of a very interesting character growing out of the fact that the asylum has entered upon its fiftieth year. The 7th of last January being the fiftieth anniversary, was celebrated with a gathering of officers and friends, where was had music, addresses, a poem, and a collation. The address of the occasion, however, was commemorative, and given by Dr. G. W. Russell. As Dr. Russell's address details step by step the long and eventful history of the Retreat, it is of course exceedingly full of interest.

Advance pages of the Medical Register of the United States, so long anticipated, from Drs. Toner and Butler is received. Physicians everywhere should promptly communicate with Dr. Butler, of Philadelphia, so that the work may not only be correct, but pushed to an early completion.

Personal.—Dr. C. D. Palmer is announced as Professor of Diseases of Women in the Medical College of Ohio. This renders his resignation from the Hospital a matter of necessity according to the rules, and the vacancy is filled by the appointment of Dr. J. H. Tate.

Desiring to deal justly with all, this reminds us, that a medical *news* paper of this city has seen fit to ventilate supposed antagonisms or disagreements between the teaching and ruling authorities of the Medical College of Ohio. The appointment of Dr. Palmer, it is alleged, is by a bare majority of the Faculty nominating, and not with the approval of the Board of Trustees. We respectfully suggest one or two things. The Trustees of the Medical College of Ohio are simply ornamental; they add no influence; they bring no patronage; they give no money: the onus of the old concern, whatever that may be, is in the energy and ability of the Faculty. And it does seem to us, under such circumstances, that the Board becomes unnecessarily inflated with its mission, when it seriously interferes with what the Faculty may request as best for the harmony and usefulness of the institution. Still, it's none of our funeral.

The Health Office of Cincinnati.—At a meeting of the proper authorities this spring, Dr. Clendenin, who has so long and creditably held the office of chief, was displaced, and Dr. J. J. Quinn was elected to the position of Health Officer. Dr. Quinn is one of our oldest and most thoroughly cultivated physicians. He enters upon his duties with energy and intelligence, and is doing good work. The advent of cholera came with the new officer, but we are not prepared to associate the two events too closely. At any rate, Dr. Quinn, or the Good Lord, or both, has done a very complete "stamping-out" process.

Death of Dr. John Morehead.—About a third of a century ago Dr. Morehead was the leading physician of this city; as practitioner and teacher he was remarkable for work and system. The following is the action of the profession of this city, and by the "old boys" in the profession of the West will be read with interest, and call up days of the past:

A called meeting of the medical profession was held in the hall of the Academy of Medicine last night, for the purpose of expressing the sense of the profession on the death of Dr. John Morehead, M. D.

Dr. John L. Vattier was called to the chair, and Dr. N. P. Dandridge was appointed secretary.

Dr. Vattier briefly alluded to his recollection of the deceased physician. He knew him to be a man of exalted character and of great erudition. He was an inveterate worker—rising early and working late, and always devoted to his profession.

On motion of Dr. Tate, the Chair appointed Drs. Tate, David Judkins, and M. B. Wright a Committee on Resolutions, which the chairman of the committee reported in due time, as follows:

"*Resolved*, That in the death of Dr. John Morehead this city has lost an earnest friend, who was intimately identified with its early history; one who consecrated to its welfare the best years of a long life, together with abilities and attainments of a high order; one who guarded the health and lives of many of our most eminent citizens, and who bravely stood at his post, and periled his life alike in behalf of the poor and the rich in the great epidemic of 1832.

"*Resolved*, That Dr. Morehead was not only a skillful and successful practitioner of medicine, but a temperate, upright, and enterprising citizen, who, by his diligence in business, perspicuous judgment, and Christian virtues, won for himself the confidence and respect of this community.

"*Resolved*, That to Dr. John Morehead, as one of the pioneers of medical teaching in the West, our profession is under lasting obligations. His didactic and clinical lectures, continued for more than twenty years in this city, gave the highest evidence of his diligence in study and the extent of his practice, while the impressiveness of his manner, the discrimination of his judgment, the breadth of his views, and the practical character of his instructions, all tended to give an elevated and ennobling view of our profession, and to impress themselves deeply upon the minds of hundreds of young men who heard them and who have now become leading physicians in the Mississippi Valley. His body may sleep in the green isle where it now lies buried, but the influence of his mind will roll on forever."

On the motion to adopt the resolutions, Dr. Tate delivered a brief eulogy on Dr. Morehead, whom he remembered in 1838 as the leading physician of Cincinnati, and the family physician of such men as Colonel Kennedy, General Harrison, Nicholas Longworth, Judge Este, Mr. Carneal, and many others of that class.

Dr. Judkins bore testimony to his remarkable truthfulness, to his bright integrity of purpose, and his singular freedom from little meannesses, such as dirty attacks in the newspapers upon his professional brethren. He was, Dr. Judkins said, a great man in the strict sense of the word.

Dr. Wright being called upon, said:

"On an occasion like this, a few words fitly spoken are enough, and yet I feel that entire silence may be misconstrued. There are many present—men who knew Dr. Morehead in name only; others who were his pupils, and who, by following his teaching and example, have become distinguished in the profession, and one who was intimately associated with him in professional labors. I shall speak of him as I knew him; not that his reputation needs to be sustained, but that younger men may have a few thoughts for reflection.

"In the fall of 1838 I was elected to the Chair of Materia Medica in the Medical College of Ohio, at which time my acquaintance with Dr. Morehead commenced. Between the date of my election and the commencement of the lecture term, a revolution had taken place in the college faculty, and Dr. Morehead was the only member left. Professors Eberle and Mitchell were tempted by pecuniary offers to unite their fortunes with the Transylvania University; Professor Cobb, under a guarantee, accepted a place in the medical school at Louisville; Professors Smith and Cross had resigned to engage in practice elsewhere.

"Professor Morehead, therefore, was the only one to whom I could look for advice and encouragement in aid of my inexperience and untried ability. There was profit in his advice, dictated as it was by sound judgment and ample experience. In the utterance of his words there was a tone of sympathy that stimulated to self-reliance and unfaltering effort.

"As a lecturer Professor Morehead did not captivate by eloquence of manner. His was not the teaching of vain show. He was deliberate, methodical, precise—not disposed to waste time in the discussion of theories that are as lights to day and darkness to morning—but he had a fixed aim to elucidate facts and apply them to profit. His ripe scholarship enabled him to become a close, direct reasoner, and to become an accurate diagnostician.

"No man was more free from guile than Dr. Morehead. He went straight to his work, using the best tried means for the accomplishment of the most good. Although in his day, as in ours, men practiced tinseling to gain popular applause, he was the plain, open-handed practitioner.

"In his day of active practice he was often charged with the vice of over-dosing his patients. From those who are believers in the superior efficacy of moon shadows, such a charge would receive full indorsement; but, like every other sensible man, he selected the remedy best suited to the disease, and graduated the dose to meet the indication.

"Dr. Morehead was proverbial for punctuality in all his engagements. During the many years of my association with him in the Medical College of Ohio, he was scarcely ever tardy in his attendance at faculty meetings. He had no indulgence for the slip-shod, lazy, indifferent practices of those men who are never up to time except when invited to a tempting banquet. Having no time of his own to squander, he did not presume upon the spare time of others."

Dr. J. J. Quinn heartily indorsed all that was said, and added a few words of eulogy, after which the resolutions were adopted and the secretary instructed to send copies of the same to the relations of the deceased.

On motion, the Committee on Resolutions, with Dr. Wright as chairman, was appointed to prepare an historical sketch and eulogy of the life and character of Dr. Morehead, and then the meeting adjourned *sine die.*

Obituary.

Dr. William Tyler Smith.—It is our sad duty to record the death of Dr. William Tyler Smith. This took place suddenly, at Richmond, on Whit-Monday, exactly forty years from the day on which he entered the profession in which he rose to such a distinguished position. Never robust, he had been failing in health for some years. Several severe attacks of epistaxis had prostrated him at no very long intervals. For more than a year he had been known to have albuminuria, his heart was weak, and he had been subject to purpura. Some months ago he had an attack of uremia, under which he was insensible for some hours. Conscious of the necessity for rest, he had lately spent from Friday to Monday in the country, and he was staying at Richmond when the end came. He had gone down to the river-side, where he was found at half-past five in the afternoon, sitting on a garden-step insensible. Mr. Hills, of Richmond, who was on the bridge, was called, and had him removed to the infirmary, where he was seen almost immediately after by Dr. Withecombe. It is needless to say that every attention that skill and kindness could prompt was given. He never rallied, but sank soon after eight the same evening. Dr. Gustavus Murray, who had seen him in the uremic attack already mentioned, believes that the fatal attack was of the same nature. At a coroner's inquest held next day, a verdict of "Died from natural causes" was returned.

Such was the end of a man whose remarkable abilities had earned for him eminent success in practice, and a name which can never be dissevered from the history of obstetric medicine.

He was born in the neighborhood of Bristol, on the 10th of April, 1815. He entered the medical school of that city, and became prosector and post-mortem clerk. He was a zealous student, and was a member of a debating society.

Tyler Smith, like so many others who have shed luster upon their vocation, was, in the most absolute sense of the word, a self-made man. Of feeble health, his early education had been necessarily neglected. This circumstance, which to most men would have been an irreparable misfortune, was to him, always self-reliant and ambitious, the spur to the attainment of the noblest and best education for work—that which a strong mind achieves for itself. He entered the medical school at Bristol; and when it is told that no other door to the temple of medicine was open to the poor scholar, the provincial schools have more than justified their existence. The great metropolitan and university schools have in our day produced few greater men. We believe his medical education was entirely carried out in Bristol, but he sought a career in London. He took the degree of M. B. at the University of London in 1840, and that of M. D. in 1848. He passed the examination for the license of the College of Physicians in 1850, and was made a Fellow in 1859. He held the office of Examiner in Obstetrics at the University of London for the usual term of five years.

For several years he was greatly dependent upon literary work. He was long engaged upon the editorial staff of the *Lancet*. He then contributed a series of biographies of the leading physicians and surgeons of the metropolis. As the materials for these were drawn from the most authentic sources, their value as historical records must be acknowledged; and howsoever justly some might dispute the propriety of contemporary biography, all must acknowledge the literary skill with which they were composed.

He first practiced in Bolton street; removed to No. 7 Upper Grosvenor street, and afterward to No. 21 in the same street. He became intimate with Marshall Hall, and was deeply imbued with the doctrines of that great physiologist. The result of this is seen in "Parturition, and the Principles and Practice of Obstetrics"—a book which he dedicated to his illustrious friend. This work, and the greater part of his "Manual of Obstetrics," were first published in the form of lectures in the *Lancet*. Vigorous in thought, wonderfully harmonious and complete in their conception, and written with a grace and clearness of diction, of which there had been no example in obstetric literature since the time of Denman, these lectures were almost wholly composed week by week, as they were wanted for the journal. They were written under the hard pressure of many avocations, one of which was the exciting duty of editorial work. The same numbers which contained these brilliant lectures contained vigorous leaders upon topics of general and passing interest to our readers. Whilst his scientific labor was reforming the doctrine and science of a department of medicine, his intellect was exerting a powerful influence upon the polity of the medical profession. The influence these now classical works have exerted upon the teaching of obstetrics is as great as that which Naegele wrought by his "Mechanism of Labor." Yet no works could differ more widely. Mechanics rule supreme in the lessons of the German author; philosophy, informed by physiology, shines in those of the greater English writer. The works of Tyler Smith are the more remarkable because at the time they were written he certainly could not have had any large practical experience. They were the fruit of an intellect singularly sagacious, far-seeing, and comprehensive. The "Manual of Obstetrics," although defective in some practical points, especially as regards the operations, immediately became the favorite text-book in this country; and this place it has retained. To this day no other book can rival it. It has long been out of print. Overwhelming occupations and failing power prevented the author from preparing a new edition.

Upon these works Marshall Hall has expressed himself, in his "Synopsis of the Diastaltic Nervous System," in the following terms: "Some years ago, Dr. Tyler Smith, at my instance and request, commenced the study of the applications of the reflex function to obstetrics. Since that time he has constantly labored with great ability and success at this subject. Upon the commencement of his investigations I promised Dr. Smith to assist him in the matter by any suggestions or advice that might occur to me, and I have constantly done so. The result has been one of those works which stamp the age in which we live, and do honor to the science and profession of medicine, and especially of obstetrics, which is now guided by a physiological principle for the first time." The cynic may perhaps detect in this eulogium a shade of magisterial egotism designed to absorb the fame of the pupil; but its truth is incontestable.

The simple enumeration of his other writings would occupy a considerable space. His first work was on scrofula. It was well written, contained some ingenious views, and had a useful effect in improving his practice. He contributed to the Medical and Chirurgical Society a memoir on leucorrhea, in which this affection was traced to its exact anatomical source. It was admirably illustrated by original microscopical drawings, for which he was chiefly indebted to Dr. Arthur H. Hassall. These drawings have become classical, and have been copied in almost every work on the subject published since this memoir was written.

He also contributed to the Medico-Chirurgical Transactions a memoir on the treatment of "Chronic Inversion of the Uterus" by sustained elastic pressure. The successful case he therein related, and the exposition of this new principle of treatment, have been followed by like success in other hands. It must necessarily lead to the abandonment of the practice of amputation of the uterus, hitherto regarded as the last resource.

Tyler Smith began his career as a teacher in the private school of the late Mr. Dermott. The lecture-room was a back kitchen of a house in Bedford-square; the access was by the area steps. But there was a good class, and a teacher whom no hospital in London could surpass. For deficiency of material he made up by ambition, by a powerful intellect, and by determined industry. His manner was ungainly; his utterance not good; he was not a fluent speaker. In spite of these disadvantages, he resolutely declined to write out his lectures; he trusted to spontaneous expression, and by dint of dogged perseverance he became an impressive and effective lecturer and speaker. He was always cool, self-possessed, quick to catch the effect produced by what he was saying. His mind was not sympathetic. He rarely excited enthusiasm in his hearers; but he rarely failed to instruct, to convince, and to lead. No one could hear him without feeling that he was listening to a powerful intellect, whose working was not merely suggestive, but fruitful in its originality—definite and practical in its conclusions.

When St. Mary's Hospital was founded by Mr. Samuel Lane and his friends, Dr. Tyler Smith was appointed obstetric physician and lecturer on obstetrics. He continued his teaching there for the allotted term of twenty years. On his retirement he was elected consulting obstetric physician.

Nor was it by his teaching alone, oral and written, that Tyler Smith raised the position of obstetric medicine. He saw with just indignation that this branch of medicine, held in inferior esteem by those who held despotic sway over medical education, was utterly unrepresented in the governing bodies of the colleges, and its study shamefully discouraged. He saw there was little to hope from "pure" physicians and surgeons, who, glorying in their ignorance, naturally took little heed to promote the scientific cultivation of obstetrics, or to improve the status of those who taught and practiced it. He contemplated the institution of an obstetric college. He founded the Obstetrical Society of London. Many may question the wisdom of the first project, but few would be able to refute the arguments by which he supported it. None will now question the wisdom of the second project. The Obstetrical Society is a magnificent success. It owes to Tyler Smith not only its creation, but its consolidation, and much of its now flourishing condition—to his valuable scientific contributions in memoirs and debate, and to his signal capacity for business. He vigorously resisted the attempt made to merge it in the Medical and Chirurgical Society. Rescued from the ignominious position of a section, it preserves its independence, and grows year by year in numbers, in power, in activity, and in usefulness. The whole conduct of Tyler Smith in relation to this society has been marked by the single desire to promote its success. To achieve this he never sought personal ends. Although not on friendly terms with the late Dr. Rigby, he not only made him the first president, but moved his re-election for three successive years, postponing his own undoubted claim in order to secure the *prestige* of Rigby's popularity. When Rigby died, all felt that the time had come to place Tyler Smith in the vacant chair.

The Obstetrical Society, at its ordinary meeting on Wednesday, paid the signal honor to his memory of adjourning its proceedings, after passing a resolution recording its regret for his loss, and sympathy with his family.

Scientific and professional work could not satisfy his restless energy. He entered upon undertakings of a commercial character. He was associated with the late Mr. Wakley in the establishment of the New Equitable Life Assurance Society, one leading feature of which was to secure the just acknowledgment of the professional services of medical men, which the existing offices mostly denied. Tyler Smith was one of the first directors of this institution. When it was united to the Briton Life Office, he became deputy-chairman of the united companies.

He conceived the idea of raising the decayed borough of Seaford to the position of a sanitarium and fashionable watering-place. He purchased a considerable piece of land in and adjoining the town, and leased more from the corporation on the condition that he should secure it against the frequent submersion by the sea, and build upon it. This speculation severely tasked his energies and his time. He was active in promoting the foundation and success of the Convalescent Hospital. He was made a justice of the peace, and at one time contemplated entering parliament.

It is given to few men—the one or two only in a generation, perhaps—to steer through the rivalry of active professional life in London without giving some ground for criticism. Tyler Smith certainly was not one of these; nor could he be. Starting poor and friendless, with all the world before him—conscious of his own worth, ambitious of fame, and not indifferent to worldly success—he had to struggle hard for both. He could not help seeing, and he felt it keenly, that high place, influence, and profit were too often the heritage of nepotism and the reward of servile mediocrity. He boldly asserted his own superior right; he fought for it; won it by sheer force of character, by unflinching tenacity of purpose, and by the yet higher merit of honest and brilliant work. In the fierce struggle, he left some of his competitors wounded on the field, himself not unscathed. These incidents in his personal career will soon be forgotten. They can not linger even in the breasts of those of his survivors who at one time felt themselves aggrieved. And this may truly be said of Tyler Smith, which can not be said of many men: that he has left behind him not only a competent inheritance for his family, but a great and enduring legacy to mankind, and an honorable name to be added to the long list of the worthies of British medicine. He was buried at Blatchington, near Seaford, where he had a residence, on the 7th of June, 1873.—*Lancet.—Obstet. Journal.*

Death of J. T. Dowden, M. D.—Dr. J. T. Dowden, of Batesville, Ind., died at his father's residence, Guilford, Ind., at 3 o'clock P. M., July 27, 1873. Disease, Cholera; aged 32 years. Married.

Reviews and Notices.

Columbia Hospital for Women. Report by J. H. THOMPSON, M. D. With Appendix.

The great value of the recent publications of the Medical Department of our army almost necessarily leads us to expect all contributions to medical literature, bearing the imprint of the government, to be similarly instructive. In the case of the volume before us, this expectation is intensified by the resemblance in form to the works referred to. We regret to write that the book does not fulfill these anticipations.

With some of us, who are not favored with official positions, there is an idea that the resources of the United States are not so stinted or so doled out as to require excessive economy in their use. But, to judge from the mechanical execution of this work, we should infer that it had been done by the cheapest and poorest workmen. A confession of carelessness is made by half a page of "Errata" at the close of the volume; but even this does not cover the errors, for we find other misprints, such as ov*e*ry p*ae*rineal and the numbers of the plates in the text not corresponding with the plates themselves. Speaking of the plates, we must say they are among the poorest we have ever seen.

But less pardonable still are errors for which the writers must be responsible; *e. g.*, repeated use of the expressions "Iodide and Bromide of Pot*ash*," "Leucocythosis," "la*bia*" for "la*bium*," "dilation" for "dilatation," etc. Again, the authors have erred greatly in the prolixity of their quotations; *e. g.*, we find twenty-two pages of extracts on the subject of carcinoma, on foreign bodies in the bladder,—cases, which the author admits are "by no means uncommon;" we have a dozen pages of quotations; still more evidently superfluous, we find the same extract twice. These long quotations are all the less reasonable, because many of them are from books which are to be found in the majority of private libraries. Such quotations are to be deprecated, because in this day of profusion of medical literature, no author should ask his readers to spend valuable time in unnecessary reading.

With pleasure we turn from adverse comment to commendatory notice, and unhesitatingly say that the work under consideration is one of the best hospital "Reports" we know of.

The first "Report" by J. H. Thompson, M. D. is replete with valuable information and useful suggestions, much of which evidently results from careful study and extended experience. The first article gives details of thirty-four operations for ruptured perinæum; next, we have a series of cases of prolapsus of the vagina; for vaginal rectocele a new operation is advocated, which, in the author's opinion, is more certainly successful than any other.

Dr. Johnson advocates amputation of the cervix in all cases of chronic procidentia uteri before attempted reduction,—a plan already proposed for exceptional cases.

A careful collation of his own experience with the opinions of modern writers upon carcinoma leads Dr. Johnson to express his views in a series of propositions, and as they are in accord with those of some of the best pathologists we give them in full:

1. That cancer is not constitutional in its origin, but the result of a slowly transpiring interstitial inflammation dependent on local irritation.

2. That there is no specific cancer cell, the cells found in the connective tissue stroma being altered epithelial cells, or the white corpuscles of the blood; their different appearances, in different forms of cancer, being dependent upon the stage of the disease and the organ in which it is developed.

3. That the probability of secondary cancer occurring after the ablation of a primary tumor depends upon the richness of the part in lymphatics and the stage of the disease. Applying these views to cancer of the uterus, our author has found few cases where the history did not unmistakably point to chronic inflammation as their cause, and for prevention, he says "If chronic inflammation of the cervix in some constitutions results in carcinoma, will it not be good practice to amputate the cervix whenever the disease is found intractable to ordinary remedial measures?'

Articles on metritis cervicitis and hæmorrhoids close Dr. Thompson's contribution to the volume.

The second report is on diseases of females, treated at the Dispensary of the Hospital, by T. A. Ashford, M. D., and is a good resumé of the "present state" of uterine pathology and therapeutics. We heartily indorse his admonition against the use of stimulants in cases of uterine disease.

The third report, from the Department of the Diseases of Children, by Samuel C. Busey, M. D., presents an article on Intermittent Fever, in which we see little to note.

The second article on Entero-colitis, Cholera Infantum, Dysenteria, and Dentitio Difficilis, is an elaborate and unsuccessful attempt to show that these diseases are so similar as to make diagnosis difficult, if not impracticable; yet in a later part of the essay we are told that "cholera infantum presents in typical cases the clinical features of a well-defined disease." Again, speaking of cases of dysentery, the author says, "Basing my diagnosis upon the presence of fever, abdominal pain and tenderness, tenesmus and muco-sanguinolent stools, I have felt compelled to separate them from cases of entero-colitis." He also says he classified all the cases of *non*-inflammatory diarrhea under the head of entero-*colitis.* We would respectfully ask what does the suffix "*itis*" mean?

In treating of the causes and the therapeutics of these diseases, the author is similarly contradictory.

The concluding article of this report is a deep and lengthy essay by the same author, upon "The Value of certain Drugs in the Treatment of Bronchitis."

The volume is closed by the report, by Dr. Webster Prentiss, M. D., on Diseases of the Eye and Ear—herpes of the cornea and trachoma being the topics selected for special consideration.

W. H. T.

Braithwaite's Retrospect. Part LXVII, July, 1873.
Half Yearly Abstract of Med. Sciences. Vol. LVII, July, 1873.
Half Yearly Compendium of Med. Science. Part XII, July, 1873.

We have received these excellent serials; all excellent in their way, and each so well known as scarcely to require individual commendation Dr. Butler is doing an excellent work in giving a compend of American medicine especially, though we find all the important matters of foreign medicine carefully prepared and preserved. H. C. Lea reprints *Ranking's Abstract* in connection with his other publications. Everybody knows all about Braithwaite.

Skin Diseases: Their Description, Pathology, Diagnosis, and Treatment. By TILBURY FOX, London. Second edition, from Third London. Rewritten and enlarged. Wm. Wood & Co., 27 Great Jones Street, New York, 1873.

This is an elegant volume of 532 pages, actually enlarged from the first edition, 1871, by 219 pages; and this is emphatically improved as well as enlarged. It is impossible to particularize extensively; but we call attention to the discussion of *Fibronia Molluscum*, pp. 351–358, and claim that our opinion of a remarkable case which was presented to the Academy of Medicine as a *keloid*, in the person of a negro, is herein sustained, viz., that it should be classed as a molluscum, or hypertrophy of the skin. Wilson is the dermatologist of England. Tilbury Fox gracefully acknowledges it in his dedication; and to Dr. M. H. Henry, 157 West Thirty-seventh street, New York, we are indebted for an early presentation of the advanced ideas in dermatology. We might present many points of interest; but the profession should buy the book and judge for itself. W. H. M.

Contributions to Practical Surgery. By GEO. W. NORRIS, M. D. Philadelphia: Lindsay & Blakiston.

This volume contains papers that have been the property of the profession for years, with new material and observations now first published. Few books of 300 pages contain so much valuable instruction to the practitioner. The evidence of the author's patient observation, judicious reflection, and sound common sense, in contrast with the flippancy of some authors of systems of surgery, is refreshing; and we devoutly pray for more of the same sort of publications.

The statistics of amputation in Pennsylvania Hospital are well known to the older surgeons, and should be to the younger.

The chapters on compound fractures, non-union, and deformity after fractures, are invaluable.

The statistics of mortality following ligatures of arteries, so far as they go, are satisfactory; but one can not but regret that Dr. Norris had not revised the chapter; for we notice the continued omission of the first published successful case of ligature of both carotids, by the late Prof. R. D. Mussey, for erectile tumor (published in *American Journal*, Philadelphia, February, 1830), and the claim of Dr. MacGill, of Maryland, to priority in successful ligature of both carotids for epilepsy.

We thank the publishers for making a readable book for a man of fifty-five without glasses; thick paper, clean type, and a solid book. W. H. M.

The Science and Art of Surgery. By John Eric Erechsen, Surgeon of the University College Hospital, London. Philadelphia: Henry C. Lea.

This new edition, in two volumes, is entirely the work of the author, without "American Notes," with many additions, from the sixth London edition. This work holds, most deservedly, the first rank as a "text-book, so called, and will be welcomed by the profession as containing the latest views of its distinguished author. It is equally valuable to the student and practitioner.

W. H. M.

The Practice of Surgery. By Thomas Bryant, F. R. C. S. Philadelphia: Henry C. Lea, 1873.

Mr. Bryant has made an original work, in the text and in the illustrations, which are taken from specimens in Guy's Hospital Museum. It is a relief not to have reproduced all the worn-out wood-cuts of past generations. The book is carefully written, and commends itself to the profession. Few books of a thousand pages contain so much instruction. It fills the place the author designed it for most satisfactorily. W. H. M.

Pharmaceutical Lexicon: A Dictionary of Pharmaceutical Science. By H. V. Sweringen, Member of the American Pharmaceutical Association. Philadelphia: Lindsay & Blakiston, 1873.

The volume before us would seem to be of considerable value to the druggist; exactly what value it could possibly be to the physician, we are at a loss to suggest. Still, for routine doctors who wish to do their work easily, we find in this volume forty or fifty pages of select prescriptions. These might be utilized to good advantage; but, after all, we can not see any great value or advantage in the publication.

For sale by Robert Clarke & Co. Price, $6.00.

Chemistry: General, Medical, and Pharmaceutical, including the Chemistry of the U. S. Pharmacopœia, etc., etc. By John Attfield, Ph. D., F. C. S., etc., etc. Philadelphia: Henry C. Lea, 1873.

We have already noticed a former edition of this book, and now, with this new edition, we re-affirm all the good things said heretofore. This edition contains some valuable suggestions to students, especially as to their outfit—the things they will need for their work. So far as the book itself is concerned, we are sure our chemical friends will find in it all that is necessary for their elementary guide.

For sale by Robert Clarke & Co. Price, $3.25.

Hand-Book of Physiology. By WM. SENHOUSE KIRKES, M. D. Edited by W. MORRANT BARKER, F. R. C. S., etc. Philadelphia: H. C. Lea, 1873.

Students of physiology for years past have found the manual of Kirkes and Paget a most excellent and reliable guide to that study. The hand-book before us is simply the same work in a new dress. Students and amateurs in physiology will find this not a mere elementary work, but a condensed work affording all the outlines of the science up to the present time. Kirkes' Physiology has been so long before the profession that we need say no more.

For sale by Robert Clarke & Co. Price, $3.75.

The Cerebral Convolutions of the Brain. By ALEXANDER ECKER, Professor of Anatomy and Comparative Anatomy in the University of Freiberg, Baden. Translated by ROBERT T. EDES, M. D. New York: Appleton & Co., 1873.

This little work will be found very valuable to the nice anatomical student. Prof. Ecker has given a great amount of care and research to the preparation of this work. Especially, we find original observations upon the development of the brain and its convolutions in the fœtus, that we find nowhere else. The book is fully illustrated, and the plates, as given, afford a very excellent study of the brain and its anatomy, independent of the special observations and studies incorporated in the text.

For sale by Robert Clarke & Co.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

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Original Communications.

Art. I.—Questions Medico-Legal.

By D. A. MORSE, M. D., Midway, Ohio.

Does *antenuptial incontinence*, and *venereal disease existing at the time of marriage*, with one party, but unknown to the other, constitute a sufficient ground for divorce?

If one party enters into the marriage relation with another, not having been informed that the second party has by an impure connection contracted syphilis, will such marriage, in the light of a contract, be *void* or *voidable ?*

Can the aforementioned conditions be brought, constructively or otherwise, within the meaning of the statutes which define the causes for which divorce shall be granted?

The law of Ohio, vol. 51 Stat. 377, passed March 11, 1853, declares, "That the several courts of common pleas in this State shall have the cognizance of granting divorces for the following causes: 1. Where either of the parties had a former wife or husband living at the time of solemnizing the second marriage; 2. Where either of the parties shall have been willfully absent from the other three years; 3. Adultery; 4. Impotency; 5. Extreme cruelty;

6. Fraudulent contracts; 7. Gross neglect of duty; 8. Habitual drunkenness for three years; 9. Where either party has been or shall hereafter be sentenced to imprisonment, and actually imprisoned in the penitentiary, etc.

Bouvier (Institutes, vol. 1, sec. 237) gives the following *conditions*, or *qualities*, as those which render marriage *unlawful* or *voidable ;*

1. Want of competent age; 2. Want of consent; 3. A former marriage subsisting; 4. Consanguinity or affinity; 5. Want of consent of parents; 6. Civil death; 7. Crime of adultery.

In a consideration of marriages that are voidable these seem greatly deficient and imperfect; but if we examine the work further we find other causes given in the discussion of the above conditions, as in section 245, *incurable impotency* is declared a cause of divorce from "want of consent," etc.

As we shall have occasion to *illustrate the meaning* of the 5th and 6th *causes* given in the Ohio law, by the interpretation of a *similar* law in French courts, we give the parallel sections of the Code Napoleon, which does away with *divorce*, but applies the same to what is termed a *separation of the bodies.*

"ART. 234. Les époux pourrout reciproquement demander la séparation pour excés, sevices et injures graves de l'un d'eux envers l'autre."

The rule running through these cases, as applied by courts, is, that where certain causes are enumerated as grounds of divorce, that those concerning which the law is silent can not be alleged as sufficient grounds, the silence being construed as evidence that such causes are not deserving of legal consideration.

The questions propounded as the basis of this article unfortunately partake of this last feature; and unless we can show that the law implies, or *constructively* includes them, we must to each question give a negative answer.

How can we show unequivocally that the law may be construed to include these causes *not mentioned*, except the *general terms* used be understood to imply them, leaving it to the court to interpret what the terms "extreme cruelty" and "fraudulent contract" mean?

First, then, to determine that the law *constructively* includes the causes in question, let us determine *what the law regards as marriage;* and, in the second place, ascertain if, *these conditions existing*, all the elements or ingredients of a lawful marriage are present.

What is marriage? Bouvier (Institutes, vol. 1, p. 101) says: "It is considered in this country as a civil contract simply, and not, as in some countries, a sacrament. As an institution established by nature it consists in the free and voluntary consent of both parties, and in the reciprocal faith which they pledge to each other. As a civil contract, it not only requires that free consent shall be lawful, that is, conformable to the laws of the state where the contract takes place," etc.

Parsons on Contracts (vol. 2, p. 114) declares marriage to be a civil contract. Blackstone (Commentaries, vol. 1, sec. 433) says the law regards marriage only as a civil contract.

Chitty (Contracts, p. 468, 469) regards marriage as a contract, and says that a suit for breach of promise can not be sustained if either party who failed to perform the contract discovered that the other was of bad character.

Addison (on Torts) says a marriage procured by false representation is a *tort.*

Bishop (Marriage and Divorce) takes a more rational view of marriage and declares it to be *not a contract* but a *status.* And in answer to the question, "What is marriage?" says, (sec 3): "Marriage, therefore, so the author deems the term to be most truly defined, is the civil status of one man and one woman united in law for life, under the obligation to discharge, to each other and the community, those duties which the community by its laws holds incumbent on persons whose association is founded on the distinction of sex."

Story (Conflict of Laws, sec. 108) says: "Marriage is something more than a mere contract. It is rather to be deemed an institution of society, founded upon the consent and contract of the parties; and in this view it has some peculiarities in its nature, character, operation, and extent of obligation, different from what belongs to òrdinary contracts." This we regard to be the true view of marriage; for in what other relation in life have two parties no power to form or disavow a contract except by consent of the state, and yet the contract be *a simple civil agreement.* In this the sovereign will of the State is the governing power. Everything, although the contracting parties must yield *free consent,* must conform to this will or all is void. Marriage, then, has a manifold relation to be considered: 1. That of the parties to each other; 2. To the offspring; 3. To society; 4. To the state; 5. To moral law.

Each of these relations must be preserved, or some ingredient of marriage is wanting. The law is founded upon the proper assemblage in a marriage of these elements; thus an idiot, or one demented, can not *consent.* An incestuous union is void: it is a wrong to the parties, an evil in the moral world, and a corruption of social elements.

The end of marriage being the procreation and perpetuation of the race, all must center in this and be subservient to it. As individuals compose the State, and as each individual enters life without his consent to form one of this great civil body, it becomes apparent that the will of the State should govern the relation of those who thrust their offspring upon its mercies, and claim its protection.

Can it justly then be considered a *contract* between two parties when a third party must be consulted, whose interests must be preserved, whose reputation must be unsullied, whose very *existence* depends alone upon its due observance and performance.

The very *existence* of the State seems to underlie the marriage relation; and the preservation of this marriage relation is the only guaranty of the preservation of its integrity as a body, and is the only safeguard of its liberties and moral power. It is from this principle emanates those laws dictating the basis of marriage and declaring the obstacles that forbid it. The State becomes the guardian of its own interests, that the greatest good, highest degree of happiness, peace and prosperity, may result to all. How is this interest in the marriage relation shown? Why has the State an unquestionable right to dictate the terms of marriage within her borders?

The *family* is the first *school* of the citizen, as well as the source from whence are derived each successive generation, who in their turn are to educate and prepare for the duties of citizens those who follow. The physical and mental integrity, as well as moral, of the *offspring*, depend upon the same conditions with each of the parents who bring them to the world: they are simple copies of their progenitors.

Again, *procreation* must sustain the stream that enters life to supply the never-failing tide departing. In this the State has the right to dictate that idiots, insane, diseased, and helpless may not be her *burden* instead of her power and support. Hence, there must be a certain degree of physical, mental, and moral perfection lest the State diminish in numerical force, in intellectual vigor, or moral strength. The State must then, as a consequence, guard against such unions as will defeat her purposes and endanger her safety or her interests. The result is, the interests of the family and of the State are reciprocal. What are the conditions to be inferred from the above as proper to be declared the basis of a legitimate union, and to which all others are *secondary* considerations? Simply what the common law has recognized—*unimpaired procreative ability.* Power to bring forth offspring—the absence of which renders a union voidable—is the *tie* that *unites the family* and *preserves the interest of the State.* On the contrary, whatever impairs generative power, either by the production of impotence or sterility, or by rendering the production of viable germs impossible, should be an obstacle to marriage.

Syphilis is a disease that, while it does not render procreative power absent, does render it impossible to a great extent to bring forth healthy offspring. It destroys the health, if not the life of its victim; is a worse scourge to the innocent than a majority of the ills mankind are subject to. But venereal disease is not declared in the Ohio laws a cause of divorce; it is not mentioned in the Code Napoleon we have cited.

Although French law has no bearing upon American cases, it seems eminently proper that when the language of such law is the same as an American law, has been in force for a long period, been subjected to every form of criticism, and has been interpreted by the higher courts, this interpretation and application in practice is worthy of consideration.

What has been the French practice? The relation of venereal disease to marriage was first considered in the French Parliament at Paris, in 1663. Whether syphilis should be regarded a cause of divorce was not decided. In 1757 the question arose in an inferior court, and it was declared that the disease in question was a sufficient cause of divorce. An appeal was taken to the Parliament, at Paris, and on December 16, 1771, the judgment of the court was confirmed.

The grounds upon which this case rested was, that the case was brought within the meaning of the law which allowed a separation for "*excés, sevices, et injures graves* (abuse, ill-treatment, grave injury), regarding syphilis as an unequivocal evidence of libertinage, and if contracted *subsequent* to marriage, infidelity. The counsel said, "What cause more legitimate for separation than the danger threatened to the healthy party, and for the offspring, if any are born."

Fodere tells us that during the time of the empire, under the Code Napoleon, in a suit instituted by a wife for divorce, on the grounds that she had immediately after marriage contracted syphilis from her husband, *the suit was not successful.* The prosecutor cited the same articles of the code plead in the previous case, cited two cases sustained by the Parliament of Metz; the views of La Prétre and Soesve. The court refused to grant a decree of separation. The court of Pau, February 3, 1806, to which it was appealed, declared the ground not one of the three causes allowed by article 234 of the code: abuse, ill-treatment, grave injury. The court of cassation confirmed the judgments, declaring that the applicant for separation had not shown in evidence any circumstance that brought the case within the meaning of the law, *i. e.*, of what she complained: *excés, sevices, injures graves.* In this seems to lie the chief cause of contradiction with the courts: the law does not define what shall constitute ill-treatment or grave injury, or, as in the Ohio law, "extreme cruelty." The interpretation is left to the court. The circumstances only can then determine in the mind of the court the true nature of the case. What in one case would be a total disregard of all the duties of marriage—the innocence of the wife, her health, life, or character—with another case would be the contrary.

Thus one knowing nothing of the nature of syphilis might contract marriage in good faith, and communicate the disease, yet the case be stripped of all its worst features. We were consulted in a case of this kind a few years ago. A young man, who, before marriage, had been licentious, contracted a syphilis which became secondary. The appearances of the disease were suppressed. He consulted an old ignoramus, who declared that it could be no obstacle to marriage. The young man had his misgivings; but, on the advice of this *quasi* medical man, married. The result of the union was an idiotic, epileptic child, born to all appearances well developed, but soon becoming an object of pity, helpless. The wife became syphilitic, with all the developments of secondary and tertiary syphilis. A servant girl who nursed the babe contracted syphilis from kissing it constantly—its lips being covered with syphilitic ulceration. The husband lay at different periods, for months, helpless with syphilitic troubles, rheumatism, etc.; treatment would suppress, *but never eradicate* the disease.

A second case, laid before me a few days ago, has called forth this article. A minister of the gospel, in good standing and of excellent moral character, applied to a lawyer in this State, where he resides, to conduct a suit for divorce, based on the grounds that he married a woman who *represented herself* to be virtuous, of fair character, etc.; but that she, before marriage, had been a prostitute, and in leading this public life contracted syphilis. I have been requested by the counsel for the husband to present an opinion upon the subject, based upon medico-legal writers. The counsel say, "The law-books contain nothing of importance on the subject." This is true if we consult American or English treatises for *direct opinions;* but if we seek for *general principles* to guide us we will find sufficient. In French works we find what the other writers fail to supply. The principal works consulted are those of Briande et Chaude, Fodere, and Devergie. We translate such portions as will throw light upon the case in question. Syphilis, under all circumstances and conditions, contracted from the brothel, is the just punishment of a parent's sin, and shows how clearly the sins of the parent may be visited, physically, mentally, morally, upon the offspring.

In the following views of the counsel, Linguet, and the advocate-general, Verges, submitted by the latter, in 1771, in a case which explains itself, we find the main points presented that we desire: "What! for a passion that perhaps repentance has followed, a woman can escape from the empire of her husband, yet she can not after an outrage that causes a poison to circulate in her veins of which the remedies the most vaunted can not always destroy all the effects. Injurious epithets, pronounced in anger, have sufficed sometimes to deprive a husband of a wife, that in the depth of his heart he respects; but they treat carefully him, who, without regard for the innocence of his wife, exposes her to the scandal and repulses of society. . . .

"In truth, marriage is an association for good and for ill; but this association is not of the ills of which the source is libertinage, the origin of which is disgraceful. The disease and infirmities which it pleases Providence to send, attack alike virtue and vice; their presence is announced by visible signs; attempted precaution and preservation can be successful. Syphilis, on the contrary, is the fruit and punishment of the debauchee. Here the contagion is concealed under the veil of affection. It is a crime for a wife to repel without motive the caresses of her husband,—is it not a crime for a husband to abuse the most sacred of ties? Why then, say we, so many judgments which have not admitted or which have formally rejected this cause?

"*It is but necessary, in order to admit it, that the truth of facts be not problematic, that the origin of the evil be not doubtful, that its effects be not transient or easily cured.* When a married couple accuse each other mutually, then an impenetrable confusion arises which conceals the source of infection; the judgment ought to be arrested, *not for insufficiency of cause*, but for that of proof. When, on the contrary, evidence is acquired that convincing facts manifest the truth, the separation is legitimate and necessary." The court decreed it. It was held at Pau, in 1806, that the law does "express in precise and formal terms the causes of separation. Venereal disease not being expressed as one of the causes enumerated *is thereby excluded;* that the causes ought not to be extended, but limited. The law having clearly defined the causes for separation, it is necessary to conclude that, from its silence concerning venereal disease, that it has not designed to make of it a cause of separation: *quod tacuit, noluit.*"

Upon this defense the court decided, February 16, 1807, "that the communication of venereal disease is not *essentially* a cause of separation of the bodies; *but at the same time, if the communication was accompanied with circumstances which gave it the character of ill-treatment or grave injury, it would be otherwise.*"

A judgment rendered in the court of Lyons, April 4, 1816, was as follows: "Whereas in itself and isolated from all particular circumstances, the communication of venereal disease ought not to be appreciated by tribunals as a grave injury, in the sense of the law, because the most often it is involuntary, the husband not having a knowledge sufficient of his condition, and because it is often difficult to recognize what is the true origin of this clandestine and mysterious communication of his nature. But considering that, in the case, all the circumstances present the character of injury the most grave for the dame V. of the outrage the most grievous for morals, and the most frightful for the family, since it comes to pass that a man knowingly infected with the disgraceful poison of the debauchee, has the infamy to defile the nuptial couch the very day he was admitted to it; of a man who has poured, with full knowledge of the cause, the germ of this shameful disease into the bosom of the unfortunate of whom he has deceived the faith; who has destroyed from the first of her conjugal life her physical and moral existence; who has thus borne in the heart and bosom of an entire family shame and despair, in place of the happiness he had promised; who has, at length, heaped up the measure of perversity in seeking to stifle the complaints and the tears of his victim by acts the most serious. . . The court confirms the first judgment, and allows to be admitted in evidence proof of the communication of the venereal disease."

Judgments might be cited similar to the above of the court of Besancon, February 1, 1808; Lyons, April 4, 1818; Toulouse, January 20, 1821; Paris, February 2, 1866; Paris, April 27, 1861. In this case the advocate-general, Pinard, gave as opinion, which was sustained, that the communication of venereal disease is a grave injury and a cause of separation, and that it matters not whether the party communicating it contracted it before or after marriage, if there was knowledge of it and its contagious nature. *Gaz des trib.*, 17 *Mai*, 1861.

Pothier (on Obligations) declares venereal disease not a cause of divorce (Marriage Contract, 515). Bishop (Marriage and Divorce, sec. 169) says: "A man takes a wife for 'better or for worse,' and waives all questions of wisdom, virtue, and wealth. 'I take you to be my wife, whether you have the qualities or not, whether you have deceived me or not.'"

The law presumes that due caution has been used.

SEC. 179. "If a woman who has been defiled pretends to be a virgin, and a man marries her on his faith in this pretension, the marriage is nevertheless good, even though she is a common prostitute." For the reason that it is presumed that if she marries she has abandoned her former vile associations, and intends to lead a virtuous life.

SEC. 180. Bishop says: "Antenuptial incontinence is no ground for divorce."

SEC. 697. The same writer says: "*Corporal infirmities which inspire disgust and repugnances, or which hinder the accomplishment of the ends of marriage, give to the other a right of divorce.*" What corporal infirmity is more loathsome, more disgusting than syphilis? What can hinder more, unless it be physical incapacity, the accomplishment of the ends of marriage? Shall a man be forced to cohabit with a female, with no other hope than that the fruits of his union will be diseased, imperfect, idiotic, or other burdens upon him, who in their turn may infect others innocent as themselves? One or two points alone remain to be considered. In reference to evidence: How shall the existence of venereal disease be proved? If the husband alleges the wife to be infected, can she be compelled to undergo an examination of experts? We know of no law to compel her to expose her person to examination—nor do we know that a refusal to do so can justly be presumed to be evidence against her.

Again, the existence of venereal disease being proved beyond a doubt contracted after marriage, to what extent shall it be admitted as evidence of *adultery?* Such has been held to be a legitimate deduction in French cases. The allegation of "extreme cruelty" requires some explanation. Trielhard, who has annotated the French code, interprets this to mean, not temporary freaks of passion, but such ill-treatment as would render life insupportable. By the Ohio reports, *words alone* can not constitute "extreme cruelty" (Wright, 212), but personal violence must be inflicted. Courts have declared that the degree of abuse necessary to constitute ill-treatment sufficient to be a cause of divorce varies with the condition in life and social relation of the parties; thus those in the lower walks of life often submit daily without complaint to ill-treatment that others in a higher social position would not tolerate for a single day. There are thousands content to drag out an existence, feeling none of those higher sentiments that spring from a well-constituted moral nature. Ignorant of the existence of a higher life, their ignorance to them is bliss. Excesses, ill-treatment, extreme cruelty, are words unknown, or, if known, incomprehensible; for their measure of life is one far short of the refined measure of more civilized life.

In this grade of life it is rare that courts are called upon to adjust matrimonial difficulties. We see daily in our practice, even here in the country, a want of harmony, a failure to comprehend the true nature and relation of married life, that if existing in the higher circles of a metropolis would soon terminate the "contract" to live for "better or for worse" as companions. But what would be the result with this class if a marriage was set aside? Simply that both parties perhaps would contract a worse one, and other questions be raised.

In mining districts, in the suburbs of cities, with tenants of foreign extraction, often marriage, instead of being the basis of union, is a perpetual disunion, discord, strife; instead of home, the abode is little less than a conjugal hell. Words, then, should not constitute grounds for a divorce; but the "extreme cruelty" should be more forcible measures, for in divorce suits it is personal violence. (Wright, 563.)

It is not the object of this article to discuss the sixth cause of divorce, given in the statutes: "Fraudulent contract." The cases cited, or points in question, might properly be considered in this light. In marriage the law presumes that both parties are capable of executing the duties implied by the marriage contract, for the duties are not expressed, but implied. In case a loathsome disease renders the accomplishment of these duties impossible, then the party aggrieved has a claim for redress of the wrongs inflicted. A party knowing himself inflicted with syphilis, its contagious character, the injury it produces, could not perpetrate a more outrageous fraud upon an innocent woman than to marry her, concealing this knowledge from her.

Neither do we desire to discuss the subject under the light of an "Error," a question of *personal identity.* Thus, if a man marries one woman, supposing he has married another, there is "error." Marrying one *impotent* has been held to be an error. In the absence of statutory enactments, a suit can be brought in several different ways that legal enactment may prevent. In Ohio, the statutes declare impotency a cause of divorce; hence actions under the common law can not be maintained.

In conclusion, what shall we declare to be the result of our research? Is venereal disease, contracted before marriage, a cause of divorce? Will it render such marriage *void*? No; nor under all circumstances *voidable.* That is *void* that never had legal value; null *ab initio.* A *voidable* marriage is good until it has been set aside. After marriage, if syphilis is contracted, it involves other questions, as *adultery*, etc. Under most circumstances we believe that a marriage contracted without the knowledge of the existence of venereal disease, would entitle the party deceived to a judgment of divorce. We can see no good reason why any court should refuse to decree it. But, on the other hand, if a party fails to use due caution, marries one known to be a prostitute and contracts syphilis thereby, no court should relieve him from his burden. It would not be *voidable.* Want of due caution would render it neither an "error" nor a "fraud."

Many other questions might be raised and points presented, but we shall not extend the paper further. If the second case cited be prosecuted to a final judgment, we will present the main points raised, in this journal, as well as the rulings upon points of evidence that *must of necessity* call for judicial opinion. Hoping the matter presented may interest all who are interested in medico-legal research, we submit all further consideration to the individual opinions and judgment of the reader.

Art. II.—Gunshot Wounds—A Case.

By C. D'RICHEY, M. D., Springfield, Ohio.

Since the introduction of the percussion cartridge, wounds by the accidental discharge of fire-arms, generally of pistols, are becoming of quite frequent occurrence, and it is a question of much importance to the physician, "How should such cases be treated?" It would be of interest to the physicians generally, if such cases when they occur were reported, with the treatment and the result, to some well-conducted medical journal.

In accordance with these views I send you the report of such a case that came under my care—one that I watched with considerable interest. J. W. Johnston, aged 20 years, a strong healthy man, was accidentally shot by a pistol in the hands of a comrade, on the evening of the 7th of June last. The pistol was one of "Sharpe's pattern," loaded with a percussion cartridge, conoidal ball, calibre 40. The ball penetrated the abdominal cavity on the left side, drawn from a point midway between the anterior superior spinous process of the ilium and the pubes and the umbilicus, one inch above "Poupart's ligament," passing diagonally backward through the abdominal cavity, and lodging in the integuments to the right of the last lumbar vertebra.

I was called to this case in a few minutes after the wounding. Found the patient much frightened, the circulation considerably depressed, very slight external hemorrhage. After satisfying myself that the ball had penetrated the abdominal cavity, and from the known penetrative power of the conoidal ball, when fired from a percussion pistol, and the direction it had taken, I feared that the intestines had not escaped injury, and came to the conclusion that I had a serious case to attend, and one that must be treated promptly. I then closed the external wound, administered a full dose of opium, and applied ice freely to the abdomen. This course I persisted in for six days, keeping my patient under the influence of opium, hoping that if the intestines were perforated, that by keeping them in a state of perfect rest and quietness they might become agglutinated, and thus prevent the escape of their contents into the abdominal cavity. This course I had to pursue under adverse circumstances—the patient's friends insisting on "getting the ball out," and sending for some one that could take the ball out, complaining that "he sleeps all the time." I had to do in this case what every young physician must do, in every country town that boasts its rival of Gross and Velpeau, *i. e.*, pocketing my pride and a multitude of insults, and suppressing considerable profanity by so doing, and holding out some pretty strong inducements, I succeeded in retaining the case. During the first four days the patient had no symptoms of serious complications until the fifth day, when I feared I had pushed the opium "too strong." The sixth day I discontinued the opium. This day the patient had an action of the bowels, voiding a quantity of hardened feces. The evening of the same day I was recalled by reason of the patient having, as he said, a "running off from the bowels" (five or six passages in an hour), and complaining of a soreness in the right lumbar region, and the whole abdomen tender to the touch. I prescribed the opium again in connection with quinia, as the patient was becoming very much reduced in strength. The seventh day I removed from the external wound shreds and patches of clothing, carried into it by the ball, and was a little surprised to see a small quantity of pus and fecal matter following. Fecal matter continued to escape from the wound during the eighth day. The ninth day I thought from the small external wound, and the granulations, that I might succeed in closing this artificial anus. So I introduced three sutures deep in the integuments, one through, and one on each side of the wound (*i. e.*, *quilled sutures*); applied also a light compress. The eleventh day I removed the sutures, and suspended the opium entirely. By this time the soreness in the lumbar region had been greatly lessened, and the tenderness of the abdomen nearly or quite gone. From this time until the twenty-first day I was in daily attendance. The patient rapidly increased in health and strength, and now is restored to his usual health, sound and well.

Art. III.—Some Remarks on Cholera.

By FRANCIS DOWLING, M. D., Cincinnati, Ohio.

In submitting the following remarks in regard to the history and propagation of cholera, it will be proper to state that I have consulted, to a considerable extent, the works of several English investigators, as well as the late work of Max von Pettenkofer, the celebrated German authority on that subject.

Although, in many respects, the causes of cholera are buried in obscurity, still the investigations which have been instituted within late years have established many facts contributing materially to clear up the general darkness which formerly enveloped it.

In order to investigate the causes of the disease, it is highly important to begin at its supposed birthplace, in India; and the question, "When did the disease first make its appearance in that country," is not only interesting in an historical and scientific point of view, but bears an immediate, even fundamental relation to this etiological investigation.

According to the statements of Macnamara, an English writer, the disease was known in India long before the Christian era. The Indian "Esculapius Charorka," who, according to the belief of the Hindoos, was instructed by the God "Dhawantara," and his pupil, "Susruta," who lived and flourished in the northwestern provinces of India for centuries before the birth of Christ, have both described a disease which was undoubtedly identical with the cholera of our day. They described it as commencing with *diarrhea* and *vomiting,* followed in succession by cramps, blueness of the lips and nails, and finally collapse and death.

About the beginning of the sixteenth century, when the Portuguese came to India, and settled there, after the discovery of the passage-way around the Cape of Good Hope, they first made the acquaintance of the disease in its epidemic form.

Then, as well as at the present day, it seems to have made periodical marches over different parts of India—sometimes traversing extensive, then again less extensive tracts of country; almost always, however, taking its departure from certain fixed points. It first made its appearance in Europe about the beginning of the present century, and is supposed to have been a result of the increase and facility of intercourse developed between the two countries about that period.

When it first made its appearance in Europe, it was supposed to be a contagious disease, from the fact that it appeared to take its course and spread along the principal avenues and routes of *human intercourse*, by land and water. More exact investigations soon demonstrated, however, that the spread of cholera in Europe, as well as in its home in India, depends essentially on "locality" and "time." It was observed that, not only with exactly the same relations in regard to "intercourse," many localities and districts were very differently attacked by the disease—some very severely, others not at all—but also that localities which were susceptible to cholera, were only so at certain times, some frequently, others less frequently.

From this circumstance they concluded that, to this cholera "germ," proceeding from India and fastening itself in some way or other on human intercourse, something else must be added, not pertaining to man, the propagator of the germ, but rather something which is furnished by the geograpical locality, and which is not present in all places, or at all times, but which serves, as it were, the part of a local nourishment for this, through intercourse, diffusable specific germ.

From the above remarks it will be seen that the propagation of cholera does not depend on personal intercourse alone, but rather that "intercourse," "locality," and "time" must work hand in hand, in order to accomplish the result. The influence of the two last factors have been called "local" and "temporary" disposition.

It has further been observed that, although the inhabitants of localities and houses attacked by cholera were alike exposed to the influence of the specific cholera causes, still they were very differently attacked by the disease—some severely, others slightly, and others again not at all. This was called *individual disposition.*

From these observations it will be seen that attacks of cholera and their frequency are essentially dependent on the simultaneous operation of many, and especially of three factors—intercourse, *local* and *temporary* disposition, and *individual* disposition. Should either one of these three factors fail in exerting its influence, no matter which it may be, the cholera can not make its appearance.

In order, therefore, to protect ourselves against the cholera, our endeavors must be directed in each of these three directions. The success of these endeavors will depend partly on the degree of our knowledge, and partly on the degree of power we are able to exercise on the individual factors; but each calculation toward preventing the disease must undoubtedly be based on these three factors. *Intercourse*, proceeding in the first direction, is the most difficult. Free intercourse is such a blessing to us that we can not dispense with it, even at the price of enjoying an immunity from cholera and many other diseases. An interruption of intercourse, carried to such an extent as to prevent the propagation of cholera, would be a much greater evil than cholera itself; and besides, if such barriers were imposed, nations would wage the bloodiest wars in order to break them down. Life is by no means the highest boon to man; there are still higher idealistic boons, for the possession of which he must be willing to sacrific even this.

If, therefore, the interruption of intercourse is an impossibility, still the possibility of purifying and ridding intercourse of this adherent germ may be looked upon as a practical and feasible achievement; but in order to carry out this last measure we must make more exact determinations than we are at present able to do, in regard to the objects that this cholera germ adheres to, and by what means it is propagated from place to place.

Owing to the imperfectly conceived idea, that cholera was smuggled in by human intercourse, it was heretofore supposed to be a contagious disease, capable of being transferred from affected to non-affected individuals, and which, during its course through the systems of those affected, was capable of generating new infectious material for others. But the evident and essential dependence of the propagation of cholera, not only on intercourse alone, but also on locality and time, contributes to render the contagious character of the disease decidedly doubtful.

Besides, experience teaches that physicians and nurses in cholera hospitals are proportionately no more subject to contract the disease, by their attendance on the patients, than those who have no intercourse at all with them. It has been observed in many of the large hospitals thrown open to cholera patients during epidemics of that disease, that not only did physicians and nurses enjoy an immunity to the disease, but also patients who were under treatment for other diseases.

In Calcutta, where the disease exists constantly to a greater or less extent, it has never been observed that the general hospital of that place has served as a nest of infection for physicians and nurses, although, during the last thirteen years, many hundred patents have been received and treated in the institution, many of them occupying wards with patients affected with other diseases.

The establishment of this fact, that the disease proceeds rather from infected localities than infected individuals, is of the utmost practical importance; for it acts as the most powerful lever in securing for the sick fearless and careful attendance on the part of their surroundings.

It is furthermore quite probable that dirty and moist washing, which has lain in a cholera locality for any length of time, is capable of conveying a sufficient quantity of infectious material to generate the disease in a locality previously free from it. So that persons coming into immediate relations with the articles may be attacked by cholera, not, however, because the clothes come from cholera *patients*, but because they were brought from a cholera *locality*, and finding in this second place the requirements of local and temporary disposition. The material thus imported is not only capable of serving as a means of infection for the few who come into immediate contact with it, but is furthermore capable of acting as seed for the development of an epidemic in this second locality, converting it also into a cholera district; whereas, were the requirements for the local and temporary disposition absent, the cases would have remained isolated or "sporadic."

From the researches of Prof. Pettenkofer in Germany, and his contemporaries in England. it has been established beyond doubt, that the character and condition of the ground in regard to moisture plays an important *role* in the development of the disease. This local and temporary disposition is undoubtedly a product of the same, serving as nourishment for the germ, without which it must eventually perish.

In looking at a map of India, it will be seen that there is a considerable tract of low land, constituting the plain of India, situated southwest of the Himalaya Mountains, where the Ganges and Brahmapootra rivers empty into the Bay of Bengal.

From descriptions of this region we learn that the ground is kept constantly moist, both by the drainage from the surrounding mountains, and by virtue of its serving as an outlet for the enormous bodies of water drained by the Ganges from a large portion of Central India, from the northern and southern slopes of the Himalaya Mountains, and from the hilly country lying between Assam and the valley of Irrawaddy. It is said that the annual amount of rain which falls here is about seventy inches, and that water may always be struck at from a few inches to a few feet from the surface of the ground. The beating of the Monsoon winds against the mountains, loaded as they are with moisture, is alone sufficient to generate water enough to inundate large tracts of land in this region—a condition which remains until the cessation of the Monsoon winds and the fall of the rivers permits the inundated districts to make their appearance again above the surface. Now, it is mentioned as a fact by those who have made this region their field of observation, that, although the cholera is a constant guest here, still as soon as these tracts of land become inundated, it disappears from the surrounding country, but makes its appearance again, however, as soon as the water falls and the rays of the sun have again gained access to the previously inundated parts.

During a series of observations instituted by an English investigator named Bryden, from the year 1855 until 1869, he noticed that, commencing with the former date, the cholera began its march upward, from the region around the mouth of the Ganges, until it reached about the thirty-sixth degree of latitude, when finally it disappeared, in 1858, from all points except the one from which it started.

In 1859, it again started out on its periodical march, pursuing about the same course that it took from 1855 to 1858. These periodical marches continued with slight variations, at intervals of three years, during the whole period of observation.

It seems, therefore, that this region surrounding the mouth of the Ganges bears about the same relation to cholera that the marshy lands along the southern coast of the Mississippi and in many of our western towns bear to intermittent fever; viz., it is *endemic* in this locality. Also, that cholera, like intermittent fever, is produced by a spore, arising from the ground under certain conditions, which, however, unlike the spore producing the latter-named disease, is capable of being conveyed through intercourse or other means to localities distant from that of its origin, and finding in this new locality the requirements for its nourishment, takes root and flourishes, awaiting only the second and third requirements—temporary and individual dispositions—to be developed into an epidemic.

Art. IV.—Abortive Treatment of Boils.

By C. B. HALL, Miller's, Ohio.

The following, applied to boils, with a camel-hair pencil or feather, gives great relief in a very short time. The inflamed surface, and a little beyond all around, should be painted with the medicine every fifteen minutes, or as fast as it dries, till a good thick coating covers the part. The throbbing tensive pain and the intense tenderness will be promptly relieved; the redness will subside; the smooth, shining integument will shrink and become wrinkled, and comfort will succeed torment. If the boil is in the first stage, it will disappear without slough. If slough has already formed, it will be quickly separated, and the cure soon complete: ℞. Tr. arnica flowers, ℥i; tannico, ʒss; gum acacia pulv. ℥ss. Mix. It should be used as soon as prepared.

Art. V.—Ovarian Tumor.

Some Notes of a Post-mortem made by W. FOSTER, M. D., Malaga, Ohio.

I'll premise by saying that, about eighteen months ago, I was called to Miss M. W., aged about thirty years; had been "weakly" for several years. Found the abdomen immensely distended, and the patient suffering from pressure, etc. No dropsical effusion elsewhere. History of the case imperfect; diagnosis difficult. Asked for counsel, but they thought it unnecessary.

In last December I "tapped" by way of exploration, and drew off a pint of lardaceous matter mixed with hairs. Six weeks afterward the patient died. At post-mortem I dissected one tumor (the one I had tapped six weeks before) that laid just over the front of the abdomen, and was attached by foot-stalk to left ovary. This tumor weighed four pounds and one ounce, and was composed of lardaceous matter thickly interspersed with hairs, from one to six inches in length, and contained one small piece of bone about an inch square.

In connection with the right ovary was a large multilocular tumor, two or three of the cysts of which were large and contained oily fluid. I drew off seven gallons of oil, and estimated the weight of this tumor to be eighty-five pounds.

I do not report this case in full, or at length, but aim at accuracy in statement as far as reported. The presence of lardaceous matter, hair, and bone, in the small tumor, is what induced me to report it to the profession.

Dr. G. W. Stewart, of Jerusalem, Ohio, was present at the post-mortem.

It was new to the physicians of this neighborhood. Most of them say they never read of such a case.

Treatment of Cerebral Exhaustion.—In his Croonian Lectures, lately delivered, Dr. Radcliffe, after describing the principal symptoms of cerebral exhaustion, as failure of memory, depression of spirits, increased or diminished sleepiness, unusual irritability, a continued craving for food or for stimulating drinks, lessened locomotive power, lessened control over the bladder, diminished sexual activity, inequalities of circulation, and aged aspect, disposition to tears, yawning, occasional faintness, epileptiform symptoms, or transitory hemiplegia, or coma, proceeds to consider its prevention and treatment. In diet, he thinks that the present system of urging persons at all weakly, especially children, to eat as much as they can, may have not a little to do in causing the development of many nervous diseases. He is equally opposed to a persistence in "training diet" and to Bantingism, believing that the nerve-tissues as well as others may be effectually starved by excluding the hydrocarbons from the food. He further thinks that too much stress is ordinarily laid upon the importance of walking exercise; much walking, in fact, seeming to be no insignificant cause of the breakdown in the patient's health, and little or no progress is made until he begins to economize his strength in this direction. He is also disposed to maintain that rest from head-work may be too much insisted upon in cerebral exhaustion. He is satisfied he has often met with patients with jaded brains who have certainly let their minds lie fallow too long. Mere distraction is not enough. What is wanted generally, even at the beginning, is not that work should be given up altogether, even for a short time, but that it should be moderated in amount or changed. He is of opinion that the wakefulness may be much better combated by attention to the position of the head in sleep than by narcotics. Sleep in bed is, as a rule, sounder with a low pillow than with a high one. On the contrary, if there be undue sleepiness, the head should be kept high.—*British Medical Journal*, *April* 11, 1873.

Translations.

Report of a Commission, composed of MM. Mialke, Mayet. Lefort, and Coonil, on determining the Constituent Elements of Blood in Blood Stains, made at the request of the Medico-Legal Society of Paris.

From the Annales d'Hygiene, Paris, July, 1873. Translated for the Cincinnati Lancet, by R. M. DENIG, M. D., Columbus, O.

In medico-legal researches in determining the existence of blood, under suspicious circumstances, the physical characters which it presents to the naked eye, the color, clots, etc., are seldom sufficient to unequivocally determine its presence. In the existing advanced state of science, now that we possess, in histologic, histo-chemical analysis, and the spectroscope, positive means of affirming the presence or absence of blood in nearly all cases, an expert would be altogether inexcusable did he not resort to these various processes which science has placed within his reach. But in order to arrive at a safe and definite conclusion, we must have not only the most delicate and accurate instruments, but trained and experienced skill in their management. It happens not unfrequently, however, that the only *role* performed by the physician first called upon to determine the presence of blood in suspicious stains is restricted, and properly so, to the collecting and preserving them intact, and transmitting them to an expert more skilled and experienced in determining their real character than he. Even in this case, his work, in order to be useful, must be done with some degree of enlightenment and skill; for manipulations, which, to an expert but little accustomed to physico-chemical analysis, manipulations, which might seem harmless, washing with water, for instance, might have the effect of rendering future research for blood-globules fruitless.

I. HISTOLOGICAL ANALYSIS.

The blood presents as elements for microscopic examination red globules, white globules, and fibrine.

The red globules are absolutely characteristic: they belong exclusively to blood; their form, their diameter, when examined intact, in fresh blood, enables us to say positively whether they belong to the blood of *man* or some other animal. Their coloring matter (*hemoglobin*) is equally characteristic of blood, and gives, by spectral analysis, rays which are peculiar to it, and which vary according as it is oxygenated or reduced. Finally, a derivative of hemoglobin (*hematin*) possesses also a special color, which may be determined by the spectroscope, and gives, with hydro-chloric acid, crystals of chlorohydrate of hematin, colored crystals, easily obtained from the most minute quantity of the coloring matter of blood, and which are sufficient to establish unequivocally their hematic origin.

a. Detection of red Globules.—The main object of the expert is, then, to discover and examine these red globules in a state of preservation as complete as possible, in order to determine, from their form and measurement, whether they belong or not to human blood. To accomplish this he must thoroughly understand the action of various re-agents on the physical condition of these globules.

The red globules are rendered spherical by the addition of water, which speedily dissolves this thin coloring matter and makes them invisible. We must carefully guard, therefore, against washing the spots with water, and especially with warm water, before making a careful microscopic examination in search of the red globules. A series of substances—acetic, gallic, hydrochloric, and sulphuric acids; the alkalies, as potash and soda even in weak solutions; ether, chloroform, etc., almost all re-agents—in a word, alter the globules to an extent that they either disappear or can no more be recognized. Care must, therefore, be taken to avoid bringing the spots to be examined in contact with any of these substances. On the contrary, alcohol, chromic acid, bichromate of potash in solution in water, preserve the globules, but alter their form.

Heat also acts differently on the globules, according to the degree to which it is carried: congelation and heat between fifty and sixty degrees destroy them; electricity acts in the same manner. These globules, we perceive, are of an extremely delicate structure.

If, in a case involving a medico-legal investigation, we are fortunate enough to obtain some blood still fluid, a drop of it ought to be placed immediately on a glass slide and brought as soon as possible under microscopic examination.

If the examination can not be made for some hours or days, it should be placed on a slide, covered with a piece of thin glass, and carefully secured from evaporation by sealing the edges with bitumen or sealing-wax dissolved in alcohol.

If we are fortunate enough to have the blood in fluid state, the red globules can easily be identified by the shape and measurement.

The red globules in human blood, and the blood of all mammaliæ with one exception (canmelidæ), are disc-shaped, slightly depressed in the center, and bi-concave. Isolated, and viewed on their surface, they present at their center an obscure point, which becomes clear when we depress the objective. When united, they pile up like pieces of corn; and seen in profile, their depressed surface is quite obvious.

Their color is red under low power, and becomes greenish yellow under greater amplification.

In order to measure their diameter, a micrometer, the value of each division of which has been carefully and thoroughly established, is used.

The red globules of man measure 1-3367 inch. Those of domestic mammifera are smaller: Man, 0.0075 mil. = 1-3367 inch; dog, 0.0073 mil. = 1-3484 inch; rabbit, 0.0069 mil. = 1-3676 inch; cat, 0.0065 mil. = 1-3706 inch; pig, 0.006 mil. = 1-4233 inch; horse, 0.0056 mil. = 1-4545 inch; ox, 0.0056 mil. = 1-4545 inch; sheep, 0.005 mil. = 1-5076 inch; goat, 0.0046 mil. = 1-5524 inch.

In birds the blood-globules are of a peculiar elliptical shape and are very easily recognized, and measure from 1.2118 to 1.1814 of a millimetre.

The more recent and fresh the blood is, the more readily and perfectly can they be seen.

In order to recognize the characteristic properties of these globules in dried blood, it is necessary first to moisten it in a liquid which will preserve their integrity. The test of these are those which approach nearest in their composition to the serum of the blood; that is to say, containing a dissolved albuminous matter, a little chloride of sodium, and some water. Urine preserves the globules, but alters their form to some extent.

The iodized serum of Schultze is prepared from the amniotic liquor, to which is added a few drops of tinct. iodine, giving it a white-wine color.

An artificial serum is made by dissolving thirty grammes of white of egg and forty centigrammes of chloride of sodium in two hundred and seventy grammes distilled water.

Liquids which contain albumen have the inconvenience of becoming easily decomposed, and should only be prepared when needed.

A liquid composed of one-half gramme of chloride sodium to one hundred grammes of distilled water has the property of preserving the globules intact.

Mr. Burgoyne is the manufacturer of liquid which perfectly preserves the globules, but so far has kept secret the method of preparing it.

The piece of linen, cotton or woolen stuff, paper or wood, as the case may be, on which the stain is situated, should be placed in a watch-glass and carefully moistened with one of the above-mentioned preserving liquids. The small, deeply colored particles, the little scales which may be found adhering to the wood or paper, should be collected and placed at once on an object-glass, moistened with one of the preserving liquids and carefully covered with a piece of thin glass. If the blood be old and very dry, and when it is necessary to protract the maceration for several days, as is sometimes the case, it may be placed in what is called a humid chamber and sold by vendees of microscopes, covered with a piece of thin glass to prevent evaporation, and subjected from time to time to examination. The more recent is the dried mass the more readily does the liquid penetrate it; when it has been long dried, amounting to years, a day or two may be required to dissolve it.

The liquid which surrounds the colored fragments is to be carefully observed under the microscope. This liquid forms a yellowish zone around the fragment of blood, and it is there, or at the border of the fragment itself, more or less completely discolored, that we meet with the red globules. It is not often that they are abundant, since most of them have been broken up and destroyed by the desiccation. When desiccation has not been of very long duration, when the stain has not been washed, especially with warm water, we can most generally recover them after a patient and careful examination, and in a state sufficiently preserved to clearly identify them.*

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* The red globules thus obtained are sometimes colored yellowish as in their normal and discoid state; sometimes globular and spheric, as globules distended with water, sometimes crenated or reduced to a faint double and

b. Examination for Fribine and white Globules.—The small fragments of blood immersed in fluid, in the manner we have directed, always become discolored after having remained any length of time in the fluid. Microscopic examination of them may reveal the presence of *fibrine* and *white globules.* Fibrine is recognized by its delicate threads, which are distended and assume a gelatiniform aspect when treated with acetic acid. The fibers retain within their network of filaments the white globules in which the same re-agent reveals the presence of nuclei. We may safely affirm that, from the measurement of the red globules in recent blood, the presence of human blood may be safely demonstrated. If the red globules can not be recognized any more, the fragments colored at first and afterward discolored, at the same time they are surrounded with a reddish zone, and the presence of fibrine and white globules in the part discolored, furnish us with a knowledge amounting almost to a certainty. In this case, however, the examination would be incomplete without the further resort to the spectroscope and search for human crystals.

SEC. II. ANALYSIS OF COLORATION AND THE COLORING SUBSTANCES OF BLOOD.

a. Spectral Analysis.—Spectral analysis is based, as is well known, upon the fact that colored bodies absorb certain colored radiations of white light, and not others. It is consequently a rigorous means for the analysis of coloration.

In order to study the action of blood by this procedure, we place in the analysis tube a few drops of it, diluted with distilled water, so as to give the mixture a delicate peach-blossom color. The tube being then fixed in the vent of the spectroscope, the luminous rays of the spectrum which pass through the liquid present two bands of absorption, between the lines D and E of Fraünhofer, in the yellow and green. These absorption bands do not

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colored outline. Their diameter is variable; for while some have the normal standard of the seven thousandths of a millimetre, others rendered spherical or dried, or reduced to a simple outline, are very much smaller.

These variations of volume and form of globules which have been dried and subsequently distended by a liquid, render it often very difficult, and sometimes even quite impossible, to determine the question as to whether they belong to human blood or to that of certain mammalia, the diameter of whose red globules approaches very nearly to that of the former.

differ from those which are produced with a solution of the crystals of hemoglobin.*

If we have doubts as to the coloring matter which furnishes the spectrum, they should be removed by the reduction of the blood, by means of substances having a strong affinity for oxygen (iron by hydrogen, tartrate of the oxide of tin, etc.) Reduced hemoglobin analyzed by the spectroscope, presents a different spectrum from oxygenated hemoglobin, and is characterized by a single absorption band, as large as the two bands united of the latter, and commences a little to the left of the line D of Fraünhofer.

b. Examination for Crystals of Chlorohydrate of Hematin.—Hematin is a product derived from the hemoglobin of the blood. It arises from the decomposition of the blood, which assumes there a dirty brown color, or by the addition to this liquid of acids and caustic alkalies. It forms, with chlorohydric acid, crystals of chlorohydrate of hematin, (called originally *crystals of hemeus*, by Teichman). These crystals are perfectly characteristic, and can be readily obtained by the following process: A small fragment of blood is placed in a glass slide, and dissolved by the addition of a drop of water, and an exceedingly small quantity of chloride of sodium is then added. The whole is covered by a piece of thin glass, such as is used for that purpose; a little pure glacial acetic acid is then made to penetrate beneath the glass covering; it is then heated over a spirit lamp to the point of ebullition. It should now be placed under the microscope, and search made for the crystals; if not found, it should be reheated after having added a small quantity of acetic acid, and again examined, until the crystals are seen. These crystals, which are very small when the quantity of blood acted on is minute, are rhombohedral in shape and of a dirty brown color. They are perfectly characteristic, and the circumstances under which they are found, enable us to pronounce with certainty on the presence of blood, and after some little skill is acquired in manipulation, they can be readily obtained from a quantity of blood scarcely recognizable by the naked eye. [It is necessary to use the chloride of sodium.] This procedure, when successful, renders unnecessary the use of the spectroscope, since it clearly establishes the presence of the coloring matter of the blood; at the same time it must be clearly understood, that neither of them proves the presence of human blood, since the coloring of the blood of all animals gives the same result.

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*Hemoglobin, which it is easy to obtain by the congelation of fresh defibrinated blood, or by mixingit with ether, crystallizes in rhombohedrals, variable according to the species of animals. These crystals of a reddish color, composed of an albuminous substance, have the property of fixing oxygen.

For spectroscopic analysis, as for the production of hematine crystals, but a very small quantity of blood is necessary. In using the former, the spots are treated with water, and if the liquid obtained is not sufficiently colored, it should be evaporated in a watch-glass, placed in a *bain-marie*, to dryness. The dried spot traversed by the rays of the solar spectrum, will give in the spectroscope the characteristic bands of absorption.

III. CHEMICAL ANALYSIS.

The procedure we are about to describe, can not be relied upon to the same extent as the preceding, since certain organic matters, as nasal mucus, pus, and saliva comport themselves in the same manner with the re-agents employed as blood. Notwithstanding this, however, we ought not to fail to put it in practice, since, if the result obtained is of a negative character, we may safely conclude there is no blood present.

Blood dissolved, in a quantity incapable of being recognized by the naked eye, or situate on a substance which has been imperfectly washed, put in contact with the resin of guaiac, and some binoxide of hydrogen (eau oxyginéé), develops immediately a bluish or greenish-blue color.

The following is the method of applying the test:

A tincture of guaiac is prepared by digesting a portion of the resin taken from the center of a large piece, in alcohol of the density of 80°; in another vessel some binoxide of hydrogen (antozone) is mixed with some pure sul. ether, and preserved in a cool place secured from light. When the tissue on which the suspected spot is situated, is white, and can be washed, it should be placed in a small capsule of glass or porcelain, and moistened with a little cold distilled water, in order to entirely dissolve the stain; the liquid is then decanted, and a few drops of tinct. guaiac and ozonized ether are then added. When blood is present, the liquid immediately acquires a blue or greenish-blue color.

The suspicious stains are not unfrequently found on vestments of different colors and material, which deprive them of their characteristic brown appearance or render them nearly invisible. When such is the case, or they have been imperfectly washed out, Dr. Taylor recommends the following method of procedure.

The suspected portions of tissue are moistened with distilled water. Two or three sheets of white blotting paper, previously tested by the guaiac process, are forcibly pressed on the moistened surface over the spots; if they be due to the coloring matter of blood, a stain of a red or yellowish-red tint is communicated to the paper. A few drops of the guaiac tincture should now be let fall on these spots on the paper. Should a *blue color* immediately become manifest, the presence of blood is doubtful, and a physico-chemical examination must be made, both with the spectrum and search for hematin crystals, in order to determine the presence or absence of blood.

If, on the other hand, the stains on the blotting paper undergo no change in color on the addition of the tinct. guaiac, a few drops of the ozonized ether are poured on, as in the former case; if blood be present, the stain on the paper will acquire a blue color, varying from a pale sky-blue to a deep indigo, in proportion to the amount of blood present.

It must not be forgotten, however, that the presence of nasal mucus, saliva, or pus will give rise to similar results.

Should, however, no color manifest itself after the successive employment of both the guaiac and ozonized ether, the stain on the *cloth* or other *substance* is not due to the presence of the coloring matter of blood. It will be seen that the guaiac test furnishes a valuable complement to the microscopical and spectral.

Conclusions and Resumé.

I. The first duty of the expert is to preserve intact the red globules of the blood, the most characteristic and easily altered of its elements. To enable him to do so, we have pointed out the liquids destructive of these bodies, in order that he may avoid their coming in contact with the suspected stains, and likewise indicated those which are preserving.

II. If the first expert consulted does not possess the requisite skill, or has not access to the necessary means and appliances, he should restrict himself to the collection and preservation of the fluid blood, or dried spots, where they alone can be obtained, and transport them in as perfect a condition as possible to a special expert.

III. The blood, if it exist in a fluid state, should be placed between two pieces of glass, and sealed to prevent evaporation, or, which is better, put in a glass tube, such as are used for the preservation of vaccine matter, and closed by holding the end in the flame of a spirit lamp.

IV. The expert to whom the suspected matter is intrusted should first carefully undertake to determine the presence of red globules, by the use of the microscope in the manner above indicated, which is no very difficult matter when the blood is recent, or the clot not very old and dried. These corpuscles must be carefully scrutinized and accurately measured, as it is on the exact determination of their size alone that will enable us to affirm whether they belong to human blood or not.

V. If the spots are of too long standing, and already so much altered that the red globules can not be recognized, his investigations must be directed to the discovery of fibrine and the white globules.

VI. If the microscopic examination enables us to establish the presence of the red globules and measure them, and also to detect the fibrine and white globules, it is useless to proceed farther, as the demonstration may be considered as complete as possible.

VII. But if the red globules can no more be recognized, owing to their being broken up. then, although we may be able to detect the presence of fibrine and white globules, it is still necessary to proceed to the analysis of the coloring matter of the blood.

VIII. The spectroscope and the production of crystals of hematin equally furnish the means of proving the presence of the coloring matter of the blood. These crystals, which may be seen when the smallest portion of blood is acted on in the manner above described, are so conclusive that when once satisfied of their presence the spectrum analysis may be dispensed with.

IX. The guaiac test, pointed out by Mr. Alf. Taylor, is especially serviceable when the results are negative, as giving positive assurance that no blood is present.

X. In order to be able to arrive at a definite conclusion, the expert should always in the very beginning divide the matter at his disposal in four parts—using the first in histological analysis, the second for spectral, the third for the production of crystals, and the fourth for Taylor's guaiac process.

Medical Societies.

CLARKE COUNTY MEDICAL SOCIETY.

J. H. ROGERS, PRES'T. ISAAC KAY, SEC'Y.

Cholera.—The above-named society held its regular session for August on Thursday, the 14th inst., Dr. J. H. Rodgers, president, in the chair. Members present—Drs. Banwell, Bryant, D'Richey, Hazzard, Kay, Nelson, Reeves, Rice, and J. H. Rodgers.

Dr. Kay reported three cases of what he regarded as true sporadic cholera, of which two proved fatal and one recovered. He had not seen either of the fatal cases until the algid or cyanose stage had fully set in. The patients were then pulseless, almost voiceless, with a blue, shriveled, and cold surface of body. These cases proved fatal in from nine to eleven hours from the first attack. There had, previously to his seeing them, been excessive purging and vomiting of the characteristic choleraic dejectures. The third case was seen before the ushering in of the collapsed stage and yielded to a prompt and active cholera treatment, consisting of sub. mur. hydrarg., with small quantities of G. opium given every ten minutes for five hours, and then at longer intervals. There had doubtless been scores of other cases of cholera in the city which had been likewise arrested in the first stage, by prompt medical interference, but which had never been mentioned as cholera. No note had been made, by the public, of cases which had recovered. Justice to the medical profession, however, required that the fact just alluded to should be taken into the account. He had been confirmed in his opinion of such arrests of the disease in very many instances, by recent conversations with other physicians. He regarded nearly all cases of cholera after falling into the algid or collapsed stage as hopeless. Others were curable. Some persons were even yet quite skeptical as to the choleraic character of our recent epidemic visitation. It did not favor the theories of such persons to say that the disease was of miasmatic origin, and therefore of a malarial and congestive and not choleraic character. Although the present disease differs slightly from the epidemic as it appeared in this country in 1832 and 1849, yet on the other hand it coincided more fully with the descriptions given by our authorities all over the world, of sporadic cholera, than it did with any other disease. Neither the cause of scientific truth nor of humanity would be served by calling it by any other name. Far-fetched theories, and numerous fanciful and even real resemblances which it might bear to some other diseases that have swept over the country, might mislead some physicians to call it by another name, but even they had adopted our regular cholera treatment.

Dr. Bryant admitted that cholera had been in this city during the last few weeks. He had not met with any case of what he would regard as true Asiatic cholera. He had been somewhat skeptical as to its presence amongst us, and made his admission more from the testimony of other physicians than from his own observations. Dr. Bryant reported a case which he submitted to the society, and let the members call the disease what they deemed best. The patient was a child aged two years, with quite choleraic alvine dejections lasting but one hour and a half. He put the case under the most prompt treatment, such as he had regarded proper in cholera. He used sub. mur. hydrarg., entirely uncombined, until twenty-eight grains had been used within two hours. This treatment arrested the disease. He believed that we had as many modifications of cholera as we had in any other affection. Sometimes there was much pain and cramping, and oftentimes not. He also related the case of an Irishman a few days since, in which there was much distress connected with the other choleraic symptoms. In this case he saw the same treatment succeed as was used in the first case. He would not call these pure cases of cholera, nor would he say positively that they were not.

Dr. Banwell said that physicians should let the public know the exact extent of cholera in our community. We were sometimes charged with trying to conceal the facts in regard to the prevalence of cholera. Hence the importance of making our reports upon this subject as full as possible. Dr. B. had had no unequivocal case of cholera, but he had met with an unusual amount of intestinal disease. He had found these cases to yield very kindly to treatment. He had much confidence in mercurials in this class of affections, but of course did not confine himself to these remedies.

Dr. Hazzard said that he had been so fully on the lookout for cholera that he had scanned all the cases of bowel complaints that had come under his observation. He then reported the particulars of several very severe cases of intestinal disease occurring in his practice since the last meeting of the society. He gave his experience in the use of calomel as a remedy for choleraic disease. He was highly pleased with its effects in certain cases. He showed when it should be used, and when not.

Dr. Reeves remarked that we were in the midst of an interesting season to the physician. Much could be learned by a close observer at such times. We were in an epidemic, but it was not cholera. It was *miasmatic* in its character. The fatal cases which have occurred here during the present summer were nothing more nor less essentially than sinking chills. He had met with several cases in Muskingum county. There were diarrhea and vomiting connected with sinking chills. He had found antiperiodics useful in such cases. We should call everything by its proper name. We are said to have cholera amongst us. He mentioned the characteristics of several cases of reported cholera, and found no reason to change his opinion after all that he had seen of the intestinal diseases of the present epidemic.

Dr. R. regarded the fatal cases on East Columbia street as similar to the Walcheren disease described by European medical authors. They were all cases of malignant chill. He had used quinine and ipecac in similar cases. He used but little of the salts of morphia. This epidemic has taken two modified forms: one is a congestive fever, and the other is dysentery. Cholera is a specific poison imported from Asia, and will never come here unless it is imported here. The large majority of our fatal cases are of a dysenteric character connected with well-marked periodic fever. He did not wish to have the reputation of being an anti-calomel doctor, for he believed in the use of calomel in many cases, and it should be used in some of the cases occurring now. The prevalence of reputed cholera in Cincinnati, Nashville, Memphis, and other cities depends upon the presence of marsh miasmata. It should be treated with bark and its alkaloids. Dr. R. thought that our late cases might be regarded as congestive fever connected with a kind of cholera. Dr. Reeves then went on to relate some facts to show that genuine Asiatic cholera was highly contagious.

Dr. J. H. Rodgers said that the case which he had reported at the last meeting of our society would have been called genuine cholera had it occurred during a cholera season. Since his reported cases there had been about twenty fatal cases of the same disease. This gave the epidemic's visitation rather an alarming aspect. When persons are rapidly carried off with cholera symptoms—dying within twelve hours from attack—we might as well consider it cholera. Giving it any other course would seem to be quibbling. And yet the disease prevalent here differs somewhat from that which is described in our books as Asiatic cholera. The present visitation of choleraic disease originated in New Orleans under such circumstances as to warrant us in calling it American or sporadic cholera rather than Asiatic cholera. One essential difference between sporadic cholera and Asiatic cholera is, that in the former there is simply a local intestinal flux severe and dangerous, whilst in the latter there is also a blood poison. So far as external appearances are concerned the two varieties are near the same when we compare two cases lying side by side, and yet there is essentially the difference above indicated. Dr. R. then proceeded to relate more particularly his experience with some recent cases of severe choleraic disease. He did not believe as much as some in the efficacy of mercurials in the advanced stages of cholera, especially in the collapse; but in the earlier stages it had doubtless been of service.

Dr. Rice could see no reason why we should not call our present epidemic cholera. Such a course will not bring us any nearer the truth. Dr. Rice then proceeded to discuss the merits of various remedies in common use in the treatment of cholera. Although he used medicines oftentimes he was not so sanguine in his expectations from this remedy as some others. He used opium with more satisfaction in this class of cases than other medicine. He also recommended chloroform in cases of severe suffering from cholera or cholera morbus. Nothing should be feared from their free but careful use.

Notice was given of a proposed amendment of the second article of the constitution, which was laid over until a future meeting.

The society then adjourned to meet again on the second Thursday in September.

CINCINNATI ACADEMY OF MEDICINE.

J. H. TATE, M. D., PRES'T. J. D. HADLOCK, M. D., SEC'Y.

REPORTS OF CASES.—*Dr. Tate* reported a case of effusion of blood under the scalp of a new-born babe. The case was first treated with evaporating lotions without effect, when, on the sixth day, he opened the tumor, which discharged about six ounces of dark blood. The child recovered.

Dr. Nelson read the history of a case of cholera which occurred at the Cincinnati Hospital, under the care of Dr. Carson, in which, during the treatment, a saline transfusion was resorted to.

Dr. Carson said, in his remarks on this case, that he resorted to the process of transfusion for the purpose of familiarizing himself with the process, and at the same time hoping to benefit his patient. Dr. Carson, in connection with his remarks, exhibited to the Academy the instrument used on the occasion.

Dr. Bartholow made some remarks in favor of the use of bromide of potash in the treatment of the summer diseases of children.

Dr. Tate said he had a case of that character, where the little patient had reached the condition immediately preceding convulsions. Bromide of potash was given in combination with subnitrate of bismuth, which gave almost immediate relief, and the patient rapidly recovered.

HAY FEVER.

Dr. Carson reported some aggravated cases of "hay fever." In the treatment he had used quinine in solution, chloroform, and ammonia, all of which had failed to give any other than temporary relief. In one case he resorted to the hypodermic injections of morphia, which relieved the catarrhal symptoms and gave the patient some rest. His plan was, after an injection, not to use it again until the symptoms returned.

Dr. M. B. Wright gave the case of a friend, who, at times, almost died in his paroxysms of this fever. He was relieved by the use of morphine, but suffered very much from the after-effects of the remedy.

Dr. Gobrecht spoke highly of the valerianate of zinc in these cases, when anything like a spasmodic affection of the bronchial passages was presented.

Dr. Orr had found good results in the treatment of these cases with the atomizer—the solution containing morphia, with sulph. zinc and bromide of ammonium.

Dr. Kemper has used "Cutler's catarrh remedy," composed chiefly of tr. iodine, carbolic acid, and quinine, with benefit and pleasure to the patient. He does not think the disease a local one. He regards so-called hay fever as properly Schneiderian asthma. He has used quinine and all the various proposed remedies, but with little effect or benefit to his patients.

Dr. M. B. Wright thought Dr. Kemper would have some trouble in maintaining his position that *hay fever* was an *asthma*. The speaker here related the case of a gentleman connected with a leather store, in Portsmouth, who always, when taking in dry hides at the store, had an attack of asthma; but when he absented himself from the store the symptoms disappeared. He looked upon hay fever as being very different from asthma.

Dr. Kemper could view it in no other light than of a Schneiderian asthma. He had never yet seen a case of hay fever but was connected with the lungs; and another fact he has noticed in this so-called hay fever, is that it occurs at any time during the year, winter as well as summer.

Dr. Carson thinks it a mistake about *hay fever* occurring in the winter. He thinks there is even a difference between the hay fever of June and August. In this connection he would remark that he does not believe in prophylactics in this disease.

Dr. Jessup has never seen much permanent relief afforded in this disease from any remedies. In one case he saw relief from smoking cigarettes which were said to contain *cannabis Indica* and possibly stramonium.

TREATMENT OF TIC-DOULOUREAUX.

Dr. Bartholow read a paper, from the section on *Nervous Diseases*, entitled "Deep Injections of Chloroform in the Treatment of Tic-douloureaux. He minutely described the process of raising the upper lip, and inserting the needle of the hypodermic syringe deeply in the tissues over the supra-orbital nerve. He related cases illustrating the permanent benefit afforded several patients suffering with this malady; also, a case of Prof. Whittaker, where, after the frequent use of morphia and atropia injections, the injection of chloroform after this mode gave speedy relief.

Dr. Juler remarked at some length upon the importance of the therapeutics of nervous diseases. He alluded to the discoveries that recent observers had made, and thought we were deeply indebted to any who undertake the study of the pathology and treatment of the nervous system; but thinks gentlemen should be careful when they undertake to instruct us. The essayist relates a case which he says was sent to him, when all the usual remedies had been tried. He resorts to chloroform by injection. It was certainly a bold undertaking, a bold operation. Had any one else done this, Dr. B. would have seen death in the operation; but Dr. B. has no fear of such attacks, he knows he will not be hurt by it: he thinks no member of this Academy, with this outline of symptoms before him, would dare assume such a risk. He thinks the swelling of the cheek presses on the nerves, and in that way does relieve the patient, and it may be, by the theory of counter-irritation, the pain set up by the use of the syringe, being a healthy pain, relieves the morbid pain. How does the essayist know but that an abscess is formed? It is deep down. In his first case only one injection was necessary to afford relief; in Dr. Whittaker's case it was necessary to make four injections. Now if such frequent injections become necessary, what is the advantage over morphia?

Dr. Buckner alluding to the effect of the distention of tissues as a counter-irritant, by the formation of an abscess, reported a case. He used injections, first of morphia, but without permanent relief; he then combined morphia and atropine, which did no better; then tried blisters; returned again to the injection of morphia, and an abscess formed, and relief was afforded. Subsequently used belladonna plaster and galvanism; does not know which of his remedies gave relief. One year after, the patient returned suffering with the same old malady. He thinks the distention and consequent depression has something to do with the relief that follows. Can not see how, in these cases, injection of chloroform has any advantages over morphia.

Dr. Bartholow said it did not matter what explanation was resorted to; but if one injection of chloroform will relieve, there is no comparison between that and the injection of morphia and atropine. The use of irritant injections in the neighborhood of nerves, for the purpose of producing irritation, inflammation, and consequent abscess, is no new theory. He cited some authors who have tried this plan of treatment and with this direct purpose. Said we could not apply a blister to the surface without affecting the nutrition of the nerve.

Dr. Buckner said the point he wished to make was, that he can not see how the anæsthesia of chloroform by injection should be permanent when not administered by inhalation.

Selections.

The Certificates of Family Physicians. By William C. Wey, M. D., Elmira, N. Y.—An engagement between a physician and his patient, in its mutual obligations, is as binding, morally and legally, as any other implied contract, and the failure of either party to perform makes him liable for the consequences of his dereliction. In this respect the profession of medicine possesses no advantages over the trades or the ordinary commercial relations of society. Estimated by such a standard, medicine, while advanced to the dignity of a profession, is surrounded by and made subservient to the laws and usages which govern the arts and crafts, and is equally amenable to judicial review, discipline, and punishment. Unlike the arts and crafts, however, medicine is obedient to a law within itself, which may or may not find expression in a code of carefully framed rules. Long before a written code of ethics found favor in the profession, which is a very modern suggestion, a sense of personal or individual honor among physicians served to keep inviolate the nature and terms of the engagement or contract between them and their patrons. The force and character of this agreement, though not strengthened by a written code, simply finds amplification in its precepts and declarations.

In a better, in one sense, though not in a more scientific or learned age, when a higher standard of honor prevailed, a written code was not required. Ignorance of professional ethics could not be accepted in extenuation of their violation. In a looser period, with cheapened education, and, as a consequence, diminished honor and responsibility, a code of rules became necessary for the purpose of keeping the ranks in the profession informed and educated up to the standard of accountability current among the wiser and more loyal members of the brotherhood. In these days, as in former days, with or without a written code, a few lead the way, and the many follow or disregard the call, as they are impelled by education, habit, policy, or some other motive.

I am led to consider this subject in connection with the question, "Ought a family-physician to grant a certificate in case of application for life insurance?"

I have no hesitation in asserting that it is no part of his duty to furnish information to a life insurance company in respect to the health of individuals who may have placed themselves under his professional care. Not only is it no part of his duty as a medical man, but it is virtually a betrayal of the trust and confidence imposed in unreserved relations between patient and physician.

Even with knowledge that the person to be insured is, and always has been, in such absolute health as to make reply to the questions asked on such an occasion a mere matter of form, and an indorsement of his physical and mental state, like indorsement of his credit or character, it is quite as much a professional act and service as if the physician's statement raised a doubt in respect to the integrity of the applicant's pulmonary or psychological functions.

If it is a friendly office purely, it carries professional significance along with it, thereby violating obligation on the one hand under cover of a personal favor, and communicating valuable information to a life insurance company on the other.

If the certificate is given for a fee, paid indifferently by the party seeking to be insured or by the company, it suggests an imputation that a moneyed compensation may influence the judgment to be rendered. This objection, in view of the paltry sum usually paid by an insurance company, is scarcely worthy of consideration. In the former case, it may be well to observe that an opportunity is offered an unscrupulous applicant and an equally unscrupulous "family physician" to combine, and for a purpose to produce a certificate, which shall reveal a standard of health upon which a policy of insurance will be sure to follow. If a physician, occupying the position of medical examiner for a highly reputable life insurance company, was found so culpable and criminal as to recommend a consumptive in the last stages of disease, as a first-class risk, on whose life a policy was issued, it is not difficult to conceive of collusion between an applicant and a family physician, prompted by motives equally offensive and condemning.

It is exceedingly disagreeable to dwell on this feature of the subject, as evidencing loose morals in the profession. An ideal standard of medicine takes no cognizance of such illustrations of baseness. Every-day practical experience with the profession as it is, not as it should be, or indeed as it would be, if raised to an even or uniform basis by education, has forced upon us the unwelcome conviction that, in spite of codes and journals and books and teaching from an endless variety of sources, the *average* men in our ranks are not above suspicion of being governed by selfish and mercenary motives.

The opinion of a reliable family physician, far beyond the recommendation of a medical examiner, carries weight with a life insurance company. Hence the importance of obtaining his approval of a risk. Paradoxical as it may appear, the physician knows the applicant, the corporeal applicant, more intimately than he knows himself. In the undisguised character of patient, his physical, mental, and moral attributes have been clearly revealed to his attendant. Nothing has been withheld, simply for the reason that to keep back information would limit the ability of the physician to render prompt and efficient aid and service.

Considering the confidential relations thus engendered and the value of the information acquired by the physician, the usual questions asked in this connection by a life insurance company—"Have you been in the habit of seeing him frequently? Have you given him medical attendance? If so, for what diseases?"—must appear like an attempt harshly to invade the precincts of the sick-room, and cause the medical attendant to betray the interests of those who have implicitly confided in its truth and honor.

The questions above given cover the whole ground of a physician's intimate intercourse with his patient, laying bare his responsible and guilty acts as well as the infirmities for which he is not accountable.

Surely it is not the object of life insurance companies to seek to compromise the office of family physician, or to invite, or for compensation to engage, him to do violence to his scruples and convictions. The custom of requiring a family physician's certificate in application for life insurance was established as a matter of business, without considering the nature of his engagement to his patient or the extraordinary demand which it exacted.

It is remarkable that a common professional sentiment did not, long ago, protest against such an attempt to procure information, on the ground, already mentioned, of infraction of ethics, and disregard of individual obligation and propriety. That a more correct estimate of this question is current in the profession I am disposed to believe, from pretty large observation among my colleagues, and from the more general extension of life insurance interests in every city, village, and hamlet in the State. The subject is thus brought directly to the attention of medical men, and they are compelled to give it more than usual scrutiny,—such scrutiny as embraces the delicate nature of the duties of the family physician in a specific as well as in a more enlarged and comprehensive field.—*Medical Record.*

Davis on the Treatment of Cerebro-Spinal Meningitis.—Dr. Nathan F. Davis, of Chicago (*Clinical Lectures on various Important Subjects*, J. Spalding & Co., Chicago, 1873), writes concerning cerebro-spinal meningitis, of which he seems (according to the Boston *Medical Journal*) to have had much experience, that he has been "unable to gather any evidences of the contagiousness or communicability of the disease." He believes the Calabar bean to be a most valuable remedy in this disease, having more apparent effect in controlling it than any other remedies which he has tried. He says he was led to employ it on account of its apparent success in tetanus, and because he had used it with benefit in several cases of muscular rigidity from irritation of the nervous centers. He employs a tincture of the bean, in combination with the fluid extract of ergot. He does not inform us what is the strength of the tincture, but it evidently differs from that of Dr. Frazer, since the dose for a child, eleven years old, is about twelve drops.

Letter-Boxes in Lunatic Asylums; a Hint for Lord Shaftesbury.—The Belgian government has recently ordered securely locked letter-boxes to be placed in all the insane asylums of the country, public or private, in positions where they will be easily accessible to all the inmates. They are designed to allow complaints and suggestions to be made to the authorities in a way independent of any of the officers or attendants. No one connected with the institution can have access to them. They are in charge of the Procureur du Roi of the district, and the letters which they contain are taken to him weekly for examination. The complaints made are investigated, and if any one assert that he is sane, he is ordered to be examined by medical experts. Abuses are corrected. The system exerts a wholesome influence, and tends to secure proper management in all its details.

The Medical Examiners.—As one deeply interested in the subject of life insurance, and having a high opinion of the benefits conferred by the institution, when rightly managed, upon society, I most heartily welcome the effort you are making to increase the safety of the companies and the security of the insured by improving the medical examinations. There is great need of improvement in many respects. Yet, if you will allow me the liberty of saying so, the *tone* of the articles in your first number conveys the impression that the fault lies chiefly, if not entirely, with the medical profession. That the companies have not as yet done all they might do to secure faithful and reliable reports as to the health and eligibility of candidates for insurance is to me perfectly plain, and the object of this communication is to very briefly present for their consideration two propositions, the adoption of which would, I believe, be very great improvements upon the present plan of doing business.

First: Let there be appointed a State or district supervisor of medical examiners. Let him be a medical man, acquainted with the profession generally, and let him appoint examiners from considerations of age, experience, character, etc. Such an officer would render valuable services to the company, and would deserve pay for his services. Under such administration, we should not see the examinership given to the first medical acquaintance made in the town by the agent, or to one who has just graduated, when there are many who have served in the capacity for years and made the subject a study. Further, and far more important, the examiner would then never be, as he never should be, the creature of the agent, or in any way dependent upon him.

Second: Whether the former plan be followed or not, let the blank for the medical examiner be invariably separate from the application, with directions to mail it direct to the home-office and not allow it to pass through the agent's hands, to be seen by him or by any one else. Generally, in small towns, and sometimes in large cities, the examiner finds it difficult to make an honest report upon an applicant without injuring himself. Frequently he is obliged to resort to some subterfuge to enable him to do his duty honestly by his employer, the company, and by his other employer and neighbor, the applicant. All this would be avoided by the plan suggested, were it followed by the companies generally, and made invariable as to individuals.

The value of these suggestions may not appear as great to others as to myself; I have learned it from an experience extending over many years as examiner for several companies, and I present them in your columns for the consideration of those interested.—J. C. R., DAYTON, O., *in Medical Record.*

Belladonna versus Opium, and Opium versus Belladonna.—Reports are frequently found in our exchanges of the antidotal effect of belladonna for opium poisoning, and, from the symptoms detailed, we feel very sure that in more than one instance the antidote proved to be the greater poison. A little caution seems to be necessary, lest the patient be killed by the remedy.

Dr. H. S. Burritt, of Bridgeport, Conn., gives, in the *Reporter*, the details of a cure in which an ounce of laudanum had been swallowed by a man forty years old, an hour before seeing him. Patient unable to stand, stupid, pupils contracted, etc. No vomiting, from large doses of antimony and ipecac, occurring in half an hour, gave a teaspoonful fluid extract of belladonna, and repeated in ten minutes, after which he (fortunately) had free vomiting. Two hours after, gave another teaspoonful of the fluid extract of belladonna (Squibb's), and repeated in an hour and a half. Two and a half hours after the last dose "the scene was entirely changed." "Pupils large, cold, pulse feeble, hiccough, respirations three to the minute, and gasping." Two fluid ounces liquid ammonia and six of whisky were given by injection. One hour after, pulse was full, heat improved. In a few hours became restless and delirious, which was controlled by morphia. The patient recovered. In this case the poison of opium and of belladonna were relieved, one by the other. The symptoms after the "scene was changed" were more alarming than before. "All is well," however, "that ends well."

As illustrating the adroitness of many lunatics in concealing their illusions, it is related that the French novelist, Balzac, once became so much interested in a man, whom he believed to be unjustly confined in an asylum, as to carry the case before the courts and obtain a decree for his liberation. On the day of his release he invited the man to breakfast with himself and a few friends. The invitation was so stoutly declined that Balzac demanded the reason, and at last extorted from the poor fellow that it was impossible for him to appear except at night, *because he was the moon.*

The student who was asked the use of starch in germination, and who replied that, "In the German nation, as elsewhere, starch is used for doing up linen and similar laundry purposes," intends to take an extra course of botany during summer vacation.—*Boston Jour. of Chem.*

Curious Case of Engorgement of Thyroid Body.—Dr. Delafield presented a specimen taken from a patient with the following history:

A gentleman, æt. 52, had always enjoyed good health, and was not conscious of anything abnormal about himself, except that he had for twenty years a small goitre on the right side of his neck. It had never given him any trouble, and it was a thing to which he had not paid any special attention. On the 22d of June, while eating his dinner, he suddenly, without apparent cause, choked over a piece of meat. From that day forth until the time of his death he was never able to eat any solids. There was no further change from the 22d of June until the 3d of October, when he noticed that the goitre was becoming enlarged, and at the same time was beginning to be painful. This condition continued for two days, when also without cause he was attacked with acute suppurative inflammation of both eyes. For this trouble the patient sought relief in the Eye Infirmary, where he was under the care of Dr. Althof. The disease ran a rapid course; both corneæ sloughed, and the contents of the eyes were discharged. He was then transferred to the Roosevelt Hospital, on the 29th of October. It was then noticed that the tumor on the right side of the neck was decreasing, and at the same time there was less difficulty in swallowing, although the patient was still unable to swallow solid food. On the 17th of November the tumor seemed to have disappeared. The difficulty in swallowing, however, remained about the same. With these symptoms he had occasional vomiting; he grew weaker and weaker; and a few days before his death he developed symptoms of gangrene of the lung, and died January 9.

When the patient was admitted to the Eye Infirmary, the principal attention was directed to his eyes; when admitted to the Roosevelt Hospital, the principal attention was directed to the tumor in his neck: but further than this his case was not inquired into as particularly as it might have been. Dr. Delafield's care of the case ceased just when the tumor was commencing to decrease.

At the autopsy the brain was found normal. The eyes were found reduced to stumps. The ophthalmic arteries and veins, and the larger veins on the cranium connected with these, were examined with considerable care; but nothing was found to account for the curious suppurative inflammation attacking both eyes.

The right lung was found the seat of gangrene in a portion of its upper lobe the size of a hen's egg, and around this the lung was hepatized. There were also one or two small spots of gangrene in the lower lobe of the same lung. The heart, otherwise normal in appearance, was much reduced in size, evidently owing to the severity and the long continuance of his disease. The liver, spleen, and the intestines presented nothing abnormal. On examining the neck the thyroid gland on the left side was enlarged, and extended down below the clavicle. On the right side where the tumor had existed, the thyroid gland was rather small; and in the soft tissues surrounding it there were found some thin layers of yellow material—presumably dry pus. The wall of the œsophagus opposite the bifurcation of the trachea was destroyed for the space of an inch and a half long, embracing pretty nearly the entire circumference of the tube. It was destroyed by an ulceration which had opened into both bronchial tubes. The edges are ragged and very little thickened. On minute examination it was found that there was some infiltration in the neighborhood—in a word, that the ulcer was cancerous in character. The trachea presented nothing abnormal until the bifurcation was reached, when an opening was found in both bronchi.

The autopsy only threw light upon one symptom; that is, the difficulty of swallowing, due to the tumor, which in its turn was occasioned by inflammatory processes.

The Early Symptoms and Treatment of Insanity.—In a paper read before the Bristol North District Medical Society, Dr. W. W. Godding, Phys. to Lunatic Asylum, Taunton, Mass. (*Bost. Med. & Surg. Jour.*), gives the following symptoms and management of insanity: In nine cases out of ten there will be marks of disorder about the clothing or person in some way, for, as a rule, the insane show untidiness of dress; the insane are often uneasy, in a constant motion, getting up, walking about the room, busy with nothing. Later in the disease, they will sit for hours in the same position; sometimes this is so from the commencement, not usually. Depression, as shown in the whole manner as well as in the countenance, is seen in the early stage of insanity, in a majority of cases. Dr. Saukey goes so far as to claim that no attack of insanity occurs primarily without an incubating stage of depression. He doubts the truth of this, but it is a very common condition. Hallucinations of hearing are not very uncommon in insanity, and must be regarded as an unfavorable symptom.

Hallucinations of sight are, in his experience, much rarer in insanity than in delirium. Want of sleep occurs in a great majority of the cases of insanity; and it is surprising how long they will sometimes survive apparently without sleep, and yet in the end recover. The return of sleep is often the commencement of convalescence. The digestion is impaired in the early stages. Sometimes the moral sentiment alone seems to be at fault. A not very uncommon form of this is seen in young persons recovering from typhoid fever. Paresis seems the very inflorescence of insanity. In regard to the early treatment, in the active forms of insanity, the two important points are to keep up the strength and to secure sleep. The first is best done by nourishment, and in many cases he thinks an early resort to the feeding tube is the humane and the only justifiable course to pursue. There is no doubt but it might be used to advantage much oftener than it is, outside of hospitals. No year passes that he does not see lives saved by its use. A full meal is often a better sleep-compeller than an opiate. Milk, egg and brandy, with a little nutmeg and sugar, is very palatable and anodyne in its action. As a hypnotic, chloral hydrate is the favorite reliance, in doses of 20 30 grains at bedtime: it will bear to be repeated, but not indefinitely. But in mania all drugs are uncertain in their effect. He holds that insane persons are not to be taken indiscriminately to a hospital simply because they are insane.

Febris Diphtheroides.—G. Harrison Gray, A. A. Surg. U. S. Navy, attached to the U. S. Naval Hospital, Yokohama, Japan (*Am. Jour. Med. Sciences*), proposes the name "febris diphtheroides" for a disease which has attracted his attention, and which differs sufficiently from any other. So far as he is aware it has never been described, and is peculiar to Chinese rivers. He first observed it up the Yang-Tse-Kiang river, afterward at Shanghai, still later at Ningpo,—both these places being on fresh-water rivers,—and finally the last traces of it disappeared when the ship again commenced cruising in salt water. Though diphtheria is by no means an unknown or uncommon disease in the northern part of China, especially about Pekin, and though intermittent fever abounds in all parts of the country, this disease which he has called diphtheroid fever, and which presents some of the features of both those mentioned, seems peculiar to fresh-water rivers, and was unknown to physicians who had resided for a long time where he saw it. From this he fancies some of the elements necessary to the production of the disease were carried there in the ship; for while in Corea many of the crew had suffered with a sort of subacute pharyngitis, and the trip up the Yang-Tse-Kiang followed immediately after the return from Corea.

Rossbach on Traumatic Pylethrombosis with Puriform Softening of the Thrombus.—The remarks of Dr. Hoffman on plugging of the portal vein and its tributaries, of which we gave a summary in our number for April 23, p. 244, are well illustrated by a case reported by Dr. Theodore Rossbach, in the *Berliner Klinische Wochenschrift* for May 26. The patient was a well-made and previously healthy stable-man, aged twenty-eight, who met with a fall from a horse fourteen days before coming under observation. He struck his belly on a sharp-cornered stone as he fell, and felt some pain from it next day. However, he continued his work for six or eight days. After this he had considerable diarrhea and swelling of the abdomen, and his strength and appetite began to fail, so that he was forced to go home. On the fourteenth day (March 1), he was slightly jaundiced, had a little bronchitis, and reduplication of the first sound of the heart. The belly was moderately tense, swollen, and tender all over, but specially so on the right side, for about a hand-breadth between the navel and the margin of the ribs, without any increased feeling of resistance. Percussion over the liver was very painful, and this organ was considerably enlarged, as was the spleen. There was a clear tympanitic percussion tone all over the rest of the abdomen. The urine contained a little bile-pigment. Pulse 92, temp. 101.1° F. During the next three days there were frequent brownish yellow stools, more meteorism, and more jaundice. Pulse varied from 92–100, respirations 24–28, and temperature from 101.3° to 102.2° F. with an irregular type. On March 5, the still frequent stools contained blood. He vomited greenish-yellow mucus with food. The jaundice, pain, and tenderness increased, as did the bile-pigment in the urine. Next day his temperature rose to 104.4° F., his pulse to 120, and the respirations to 36, accompanied with moist rales. March 7.—There were bilious vomiting and frequent stools with blood in them. He had more dyspnœa and was delirious. From this to March 8 he had six or eight severe rigors, and then became comatose, and passed urine and fæces involuntarily. Meteorism was extreme; pulse 128, respirations 36, temperature 106.7° F. March 9.—Five more rigors. Tongue and lips dry, and fuliginous. Delirium and coma increased. Breathing stertorous, rapid, and shallow. Temperature 107.96° F. Pulse small, 140. March 10.—More urgent hiccup, bleeding from the nose, and vomiting of blood supervened, whilst the rigors and diarrhea ceased. He could no longer be roused, but collapsed more and more, and died at 3 P. M., with a temperature of 108.14° F., after the sudden flow of a quantity of blood from his nose and mouth. At the necropsy, no thoracic disease except bronchitis and hypostatic congestion was found. His abdomen was much distended with gas, but only contained about three pints of turbid flocculent exudation. The whole peritoneum was injected, thickened and covered with shreddy lymph, but that of the ileo-cæcal region seemed to be principlly and primarily affected. The superior mesenteric vein was coated outside with a thick, easily removable exudation. The vessel felt elastic and cord-like, and had a smutty bluish-red color at some spots, grayish-red at others. On section, its trunk was found filled with a friable grayish-red mass of coagulated blood, resembling minced liver when cooked, consisting of conglomerated masses, the several portions of which ranged in size from that of a pea to a half bean, mixed with yellowish red, thick, pus-like fluid. The inner surface of the vein was bluish red, had lost its lustre, and in two spots showed a loss of substance about eight to ten lines long, and two to three lines broad, with irregular borders. The branches were filled with purulent fluid of less consistence. The splenic vein from its portal end for about one-third of its length showed similar plugging; the remaining two-thirds allowed dark thick blood to escape on section. The trunk of the vena portæ itself contained in its left half a stout but friable thrombus, adhering to its wall, and extending into its left branch, whilst the right was filled with a hazel or grayish-red but not offensive smelling, gruel-like fluid. Its inner and outer coats, as well as those of the splenic vein, resembled the description just given of the superior mesenteric vein. The liver was greatly enlarged and very unusually dark, whilst its left lobe was variegated by lighter spots, about the size of a florin, of a grayish tint. The first section made into the right lobe gave exit to a considerable quantity of reddish-yellow pus, which came from an abscess of the size of a fist, whose walls were frayed and irregular; it was situate about an inch from the surface of the liver. Two smaller abscesses, of the size of hazel-nuts, were discovered; and more purulent fluid flowed from branches of the vena portæ. Another large abscess, about the size of a hen's egg, was found in the left lobe of the liver. The microscopic examination of the thrombi showed a finely granular detritus with cellular elements. The lighter portions of the liver showed enlargement of the liver-cells, which were crowded with numerous granules, and less sharply defined than normal. Dr. Rossbach thinks the course of the disease was as follows: After the accident, there occurred slowly developed and circumscribed peritonitis, which became general later on; the inflammation spread to the portal vein, and secondary thrombi were formed. Or there were a primary thrombus induced by pressure or irritation of the vein, with secondary changes in the walls; block of the portal territories; enlargement of the spleen, diarrhea, and early formation of hepatic abscesses through emboli; enlargement of the liver and jaundice from obstruction of the bile-ducts; fresh thromboses, leading to fresh congestions—hence the occurrence of blood in the stools; maturation of the abscesses in the liver, rigors, and all the fatal symptoms which ended in death. Traumatic embolisms and thromboses, although not very unfrequent, have not recieved much attention until a recent date. The case given by Frerichs, from Lambron, will be found at p. 409 of Dr. Murchison's translation, vol. ii, New Sydenham Society. An interesting case of embolism of the subclavian vein from fractured clavicle is given by Mr. Erichsen, in the *British Medical Journal* of June 7, 1873.—*London Medical Record.*

Medico-Legal Importance of Intracranial Abscess.—We find in the *Medical Times and Gazette* (Febuary. 15, 1873) the following instructive remarks on this subject:—

"It has been well said that no injury to the head is so trivial as to be thought lightly of, while scarcely any is so severe as to be altogether despaired of. The obscurity of the lesions produced by blows or falls upon the skull, the difficulties attending the right interpretation of the symptoms which result, the variations in the length of time after an injury when these symptoms appear, and the varied secondary ill-effects which may supervene upon the earlier and more immediate ones, are features about this class of accidents only too well known to surgeons. Many persons have received fatal injuries to the head without experiencing any, or, if any, only slight inconvenience for some time, but who, after ten, twenty, or fifty days, have complained of headache and feverishness, soon to become delirious and unconscious, and ultimately comatose and dead. Many have been the cases of fracture of the skull in which no symptoms indicative of so grave a lesion have shown themselves until necrosis of the bone or intracranial inflammation, or both, have declared themselves by the fatal disturbances which they excite. Nor is it necessary, in order that these later consequences should be produced, that the skull should be fractured; the detachment of a large portion of the scalp, or the separation of the dura mater from the bone, is quite sufficient injury to be followed, after some days have passed away, with inflammation or suppuration within the cranium. Most surgical authors have recorded cases of the sort, and Mr. S. Cooper has left on record one case of lacerated wound of the scalp without injury to the bone, in which the patient went on well for seventy-seven days, but was then seized suddenly with hemiplegia, and died on the ninety-ninth day after the accident from an abscess in the substance of the brain on the side opposite the injury. In fact, it would be difficult to say what is the minimum amount of injury to the bone or soft parts which may terminate in some such result, providing proper care and rest be not insured, and if the person injured be a weakly and intemperate individual. Neither would it be easy to put a limit to the time at which, after an injury to the head, suppuration within the cranium might commence—any more than it is to say, after it has taken place, whether the pus will be found upon the side of injury or on the opposite side, between the bone and dura mater or between the membranes, in the sulci of the convolutions or within the substance of the nervous matter itself. Certain it is that several weeks may elapse ere symptoms show themselves; and this fact is one to which that great surgeon, Pott, has especially drawn attention, as being well worthy the practitioner's constant care, lest he neglect the only opportunity and means by which his patient's safety can be secured. So, too, Astley Cooper notices especially the time when inflammation of the brain or its membranes follows upon violence. He says it is often about a week—never more; but frequently it does not come on until a fortnight or three weeks after the injury, and even more time must elapse before the person is quite safe or ought to deviate from a temperate regimen; and he refers to a case where inflammation of the brain was brought on as late as four months after a blow on the head.

Croup—Tracheotomy—Recovery.—Dr. Swan reported the case and showed the specimens: H. L., æt. four years and eight months, a well-nourished, healthy looking boy, had symptoms of spasmodic croup on the 5th instant. He had already had four entirely distinct attacks; the first having occurred at the age of 17 months, the last in April, 1872, for which I saw him. It terminated in a mild bronchitis of two weeks' duration. The father, when a boy, nearly lost his life by what is supposed to have been membranous croup. The spasmodic attack of the 5th instant had been preceded by a sore throat, with enlarged cervical glands, of ten days' duration, but terminating, apparently entirely, some three weeks before the attack, nothing having marked the interval, except perhaps a slightly inferior condition of the general health. The spasms occurred and continued for a while, principally at night, and the days were pretty comfortable. There was some febrile movement the first forty-eight hours, during which the pulse reached, at one time, 120. In about five days, *i. e.*, the 10th inst., the voice was reduced to a husky whisper, phonation being quite exceptional, and, when occurring, very high-pitched and unnatural. The dyspnœa, which had been intermittent and concerned principally with the inspiration, now became constant, though varying in pegree, and the expirations were also forced and audible. Deep epigastric depression occurred with every inspiratory act. The cough was dry and painful, and signs of distress were too apparent. On the 11th, the chamber was imperfectly supplied with steam, but on the following day a regular and abundant supply was begun, and this was maintained throughout the principal part of the treatment. The disease progressed from bad to worse, the greatest dyspnœa being in the night, but the color had continued till the morning of the 13th inst., about the eighth day from the first attack of dyspnœa. On that morning, there was marked lividity of the hands and face, and the patient lay upon his side exhausted. While preparations were making for tracheotomy, I was suddenly called, and saw that he had ceased to breathe. Faint pulsations of the heart were still audible to the ear placed upon the chest.

There was neither time nor occasion for ether. The trachea was at once opened, and a double canula inserted. Artificial respiration was begun by blowing directly through the canula, and after five or six inflations, the natural breathing began, and in a little while the child was restored to consciousness. A fibrinous cylinder, cylindrical for an inch of its extent, was immediately thrown off through the tube, and this was the first ocular evidence that any such deposit had occurred, the throat having been found perfectly clean whenever examined, although the fauces had a tumid look, with narrowed isthmus. On the following day, another cylinder, similar to the first, though perhaps narrower, was thrown off through the tube, after a struggle which threatened suffocation. At other times, small fragments came away without special effort. The patient went on well after the operation. The secretion of thick, tenacious, semi-purulent mucus, which seems to mark the favorable cases, as distinguished from the watery secretion which spatters out through the tube in the unfavorable ones, continued copious and essentially the same in character throughout, occasioning, at times, not a little trouble to the patient in his spasmodic struggles to get rid of it, and to the attendant whose duty it was to keep the canula clear. The room was kept at a high temperature—76° to 80°—and the steam was allowed to be always perceptibly felt in the room. Moreover, the lowering of the temperature and the withdrawal of the steam were made a gradual process from day to day. On the 18th inst., five days after tracheotomy, the tube was removed, an hour after the administration of an opiate, and there has been no occasion to return it. For some days afterward, there were occasional laryngeal spasms, generally connected with efforts at expectoration, and these were at times almost alarming; but it has been interesting to watch the gradual return of function to the larynx, the wound in the trachea meanwhile gradually closing, and the strength, appetite, and sleep regularly improving. The wound is now (26th) nearly closed, cough and expectoration at minimum, and voice very good.—*Boston Society for Med. Improvement.*

Flexions and Versions of the Uterus, with Mechanical Treatment of Uterine Deviations.—In an exhaustive article published on the above, by Dr. B. S. Schultze, in the *Archiv fur Gynækologie*, the author puts down various conclusions, which may be summed up as follows: 1. The normal position of the empty uterus is anteflexion or anteversion. When a woman is in a standing position, the posterior surface of the uterus is turned upward. 2. Anteversion and anteflexion must be regarded as pathological conditions only when the uterus is fixed in its vicious position, or limited in the movements which are communicated to the organ.

3. Thickening and shortness of Douglas' ligaments (the habitual consequences of parametritis) constitute the usual causes of the persistence of anteversion or abnormal exaggeration or anteflexion. 4. On the other hand, the lengthening of the same ligaments (through muscular weakness of the retractores uteri) necessarily leads to retroversion and retroflexion, of which it is the most frequent cause. 5. The line of flexion of the uterus follows exactly the primarily anterior or posterior surface of the organ. If the body of the flexed uterus is more or less deviated to the right or left, almost always there exists at the same time a rotation of the organ on its axis. 6. Pressure exerted on the abdominal viscera increases the following deviations: normal anteversion, or anteflexion of the empty uterus, abnormal flexion backward (through posterior fixation), retroversion and retroflexion through laxity of Douglas' ligaments. 7. Uterine catheterism does not suffice for recognizing the normal situation of the organ, and the direction of its deviations. Palpation with both hands, properly effected, is a safer way of making out the diagnosis. 8. Persistent anteversion and anteflexion of the uterus can be combated with benefit only by the help of revolving agents that tend to cause the disappearance of the exudata which maintain the uterus in its vicious position. 9. Retroversions and retroflexions, whilst they are yet reducible, must be treated by means of the hand, and not of the uterine sound; but in the greater number of cases it becomes necessary to have recourse to mechanical means for maintaining the uterus in its normal position—namely, slight anteversion. 10. The only rational means of overcoming displacements of the uterus backward is retroposition of the vaginal portion. The innumerable intra-uterine pessaries used for the purpose do not generally contribute much to that effect; but the use of Dr. Schultze's modified vaginal pessary produces this result: when the vaginal portion is fixed behind, intra-abdominal pressure maintains the uterus in a position of normal anteversion, 11. Pressure exerted by the abdominal viscera is not capable of modifying flexion. When in such cases of flexion pain is abated by retroposition of the vaginal portion, it may be necessary to add an intra-uterine sound to the vaginal pessary.—*London Lancet, May*, 1873.

Cowling on a Fatal Case of Carbolic Acid Poisoning.—Dr. Cowling, of Louisville, records (*American Practitioner*, May, 1873) a fatal case in which a tablespoonful of pure carbolic acid, mixed with about twice its bulk of water, was administered by an attendant in error. Ten minutes afterward, the patient was seen by a physician. She was then lying in an unconscious state; the pupils contracted and insensible; breathing about 50 per minute; pulse 150, rather small, feeble, and intermittent; surface bathed in clammy perspiration. The mouth and throat, as far as could be seen, were whitened by the action of the carbolic acid; and the pharynx and larynx were filled with mucus, giving rise to tracheal rales. She had, a few minutes before Dr. Cowling saw her, swallowed two or three teaspoonfuls of syrup of ipecacuanha. Dr. Cowling anointed with sweet oil the lip, cheeks, tongue, and throat, as far as could be reached with the finger. An attempt was made to get her to swallow oil and white of egg, but failed. The stomach-tube was then passed down the œsophagus, and a pint of oil and albumen was pumped into the stomach, and, after remaining a short time, was withdrawn. No odor of carbolic acid could be detected about it, from which it was inferred that the carbolic acid expended its force before reaching the stomach. Two ounces of whisky were then thrown into the stomach, and the tube was withdrawn. The pulse was 160 and a good deal weaker, still intermittent; temperature normal; respiration somewhat quicker; pupils contracted and insensible; countenance indicating a cyanosed condition; the superficial veins of the head distended. Oxygen gas was then administered, under which the breathing became fuller, the pulse a little stronger, and was reduced to 140 or 150; but consciousness did not return, and the breathing was still greatly obstructed by the mucus accumulated in the lungs and trachea. Tracheotomy was proposed, but the amount of laryngeal obstruction did not seem to warrant it. Transfusion was also suggested, but was objected to on the ground that the violence of the poison seemed to have been expended on the nervous centers to such an extent that the transfusion of fresh blood would be useless. She gradually sank, the pulse becoming flickering, the extremities cold, and the breathing superficial, and died about two hours after taking the poison.

Cause of Yellow Fever.—We find the following in the interesting commemorative discourse on the character of Samuel Jackson, of Philadelphia, by Professor Jos. Carson: "It is an interesting fact in the history of the medical profession of Philadelphia, that an association sprang up in 1799 which was called the 'Academy of Medicine,' and that it had as its founders men who advocated the non-imported and non-contagious origin of yellow fever. Among these were Physick, Dewees, Coxe, Caldwell, and, subsequently, Rush, who had become a convert. This institution was in antagonism to the College of Physicians, in which body the contrary doctrines had their warmest supporters. Before the Academy of Medicine, Dr. Jackson read his papers in 1820. By indefatigable perseverance, and by tracing reports and common rumor to their very source, he had determined that the epidemic of 1820 had not been imported, but that its origin was domestic and local. At the localities where it prevailed he found abundant sources of production in accumulated filth and putrescent animal and vegetable material, and could discover that in no case where individuals laboring under the disease were removed did they propagate it by infection, nor by the sick was it communicated to attendants or relatives who had not been exposed to the same local influences.

"The measures which were adopted under his guidance were the removal of all the inhabitants of the infected districts to more salubrious positions, the barricading by fences the localities in which the disease originated, and, as far as practicable, removing offensive matters. In consequence of the measures of the board of health, the city councils were induced, with the aid of the leading medical bodies, to devise such sanity measures as would prevent a recurrence in future of this calamity. But once since (in 1853) has yellow fever appeared in Philadelphia, and then it was suppressed by prompt and effectual measures.

"It may be stated that, while the source and cause of the 'black vomit' of yellow fever were subjects of conjecture rather than of scientific research, at the time Dr. Jackson's paper was written, he attributed it to hemorrhage, not to secretion—a view that in latter times has been subjected to the full test of chemical and microscopic examination, and has acquired the force of demonstration."

Obstinate Intercostal Neuralgia of Three Years' Standing, following a Severe Attack of Herpes Zoster, cured by Hypodermic Injections.—A. F., aged 70, married, was admitted into the Montreal General Hospital on the 26th September, 1872, suffering from severe paroxysmal pain in the left side. She states that *three years* *ago* last March she was suddenly seized with severe shooting pains in the left side, followed, in two or three days, by the appearance of many small blisters, looking, as she says, "as if it had been *burnt.*" The part thus affected subsequently remained ulcerated and sore for a length of time, but finally healed, but the pain which had accompained it throughout remained, and, indeed, she has never been entirely free from pain in the part since the first commencement of the attack, and latterly this pain has been becoming more severe. The pain is now evidently neuralgic, occurring in violent paroxysms, and following apparently the course of the seventh and eighth intercostal nerves. It is darting and stabbing in its character, and the usual anterior, posterior, and mid-lateral *tender points* are extremely well marked. There are to be seen, surrounding the left half of the chest, just below the mammary gland, a series of cicatricial patches, varying in size from half the palm of one's hand to that of a quarter of a dollar, white and glistening in appearance, and which at first were naturally taken for the scar of a burn, until the previous history just related was known, and it was found that the cicatrices extended exactly from the sternum to the vertebræ round one side of the body.

Ordered cod-liver oil, and to have a hypodermic injection of one-quarter of a grain of muriate of morphia every night. It is unnecessary to give a detailed report of this case. Relief to the pain was immediate; the tenderness of the "points" soon became much less, and she slept soundly at last without the morphia. Discharged cured, for the time at any rate, on the 28th October, 1872, after just one month's treatment.

This case is an example of the extreme severity of some of the neuralgias, which are found to be accompanied by herpes zoster; also, of the extent to which the latter may lead to ulcerative destruction of the skin, and the obstinacy and persistence of the subsequent painful affection.—*Canada Medical and Surg. Journal.*

Why Insanity Increases.—Sir James Coxe, Commissioner of Lunacy for Scotland, in discussing this subject, strikes at the root of this and many another evil of our civilized life, when he says in his last address:—

"Communities should be trained in a knowledge of the human organism, and of the laws which determine its welfare. Ignorance of such knowledge has an all-pervading influence. It affects the proceedings of the legislature, of the clergy, and of teachers, and through their instrumentality the conduct and behavior of the whole community. In the first place, the complex nature of the human mind is overlooked; education is too much restricted to the cultivation of the intellectual faculties, and even their training is, as a rule, only partial and imperfect. In the second place moral training may be said to be almost entirely neglected; and the same remark is applicable to physical training.

"The neglect of physical training is almost universal, and even where it is attempted, it is calculated to do, perhaps, more harm than good.

"My doctrine then is, gentlemen, that insanity, so far from being a disease of civilization, is a disease of ignorance, and the only way in which its extension may be checked is by imparting to every man a knowledge of the structure of his own body, and of the relations in which he stands to the moral and physical world around him."

This is sound doctrine, and we commend it to the thoughtful consideration of that class of physicians who fancy any physiological instruction furnished the public is *margarita ante porcos.—Philadelphia Reporter.*

A Physician's Diary of Business.—A pocket diary has been picked up in the street, and now is in the finder's possession, awaiting its owner. From the following extracts, it appears the loser was a medical man:

"Kase 230. Mary An Perkins. Bisnes, washwoman. Sikness in her hed. Fisik sum blue pils a soaperifik; age 52. Ped me one dollar, 1 kuarter bogus. Mind get good kuarter and mak her tak mo fisik.

"Kase 231. Tummes Krinks, Bisines, Nirishman. Lives with Pady Molouny whot keeps a dray—Sikness, digg in ribs and tow blak eys. Fisik to drink my mixter twict a day of sasiperily bere and jellop, and fish ile, with asifidety to make it tast fisiky. Rubed his face with kart grese liniment, aged 39 years of age. Drinked the mixter and wuddnt pay me bekase it tasted nasty, but the mixter'll work his innards I reckon.

"Kase 232. Old Misses Boggs. Aint got no bisnes, but plenty of money. Siknes awl a humbug. Gav her sum of my celebrated "Dipseflorikon," which she sed drank like cold tee—wich it was too. Must put sumthink in it to mak her feel sik and bad. The Old Wommen has got the roks."

Editorial.

The Medical Schools of this city have been engaged in a course of preliminary teaching during the month of September, the regular term commencing the first of October, just about as this number of the LANCET AND OBSERVER is being issued. The prospect is already satisfactory for the usual large classes. The attendance at the *Miami* thus far, during these opening weeks, is in advance of previous years, and we learn that other schools make a like favorable report. We are also pleased to notice that there is an increasing disposition on the part of students to be prompt in their early attendance. If the study of medicine is of any importance to students it should be made "business." The habit of coming to the city late in the season, under the plea of urgent requirements at home, can not but seriously depreciate the value of the instruction sought. If the medical man hopes to make his professional life a success, he needs to fortify himself with every possible resource of the art; and, as a rule, the earnest, prompt, and industrious student, even if this mode be attended with sacrifice, will ultimately find he has made the true investment. So we hope all medical students will determine to be on hand the opening day, purposing to remain until the last lecture is delivered and the last quiz held.

Hydrated Oxide of Iron.—In reply to the query of a correspondent we refer him to the last edition of the United States Pharmacopœia, for the ready mode of preparing extemporaneously the antidote for arsenical poisoning. To aqua ammonia ℥xx, add water two pints to the mixture; add gradually, stirring constantly, one pint solution of the tersulphate of iron. Pour the whole on a wet muslin strainer, and wash the precipitate with water until the washings are nearly tasteless; lastly, mix the precipitate with enough water to measure one and a half pints. This process may be hastened in case of emergency by pressing the strainer until no liquid passes, but the product is not so perfect. If solution of tersulphate of iron is not at hand, the mur. tinct. of iron may be substituted with essentially the same result.

A Practical Reformer.—Most of our readers will remember the travail, some years since, of President Bergh, of New York, and of the Female Branch of the Pennsylvania Society for the Prevention of Cruelty to Animals, on account of the frightful tortures inflicted by the physiologists upon the lower animals. As the wicked physiologists have continued to torture the unfortunate dogs, cats, rabbits, rats, and other creatures in the lower ranks of life, it is to be hoped that time and usage have rendered these afore-mentioned philozooists less sensitive, and thereby relieved their sympathetic sufferings. Feeling, however, as we do for them, we hail with delight a prospect of relief. One Mr. Rusden, of Melbourne, Victoria, has read an essay before the Royal Society of the place, containing a proposition which does honor to his heart and head, and which will do away with all excuse for the unhallowed practices at present indulged in.

Being of a practical as well as of a philanthropic turn of mind, Mr. Rusden proposes to accomplish several ends at once. When his scheme is carried out, "the honest, starving poor will no longer be so mistaught as that crime will entitle to state maintenance, and solve all their difficulties," and "criminals, by being made to work for their support, will not compete with honest labor." Hence there is the solution of the vexed question, What shall we do with our criminals? The convicted persons are to be utilized as subjects for physiological, medical, and surgical experiments. For this purpose they are to be divided into three classes: 1. Those convicted of minor offenses, who are only to be employed in testing the value of various forms of diet, or of such drugs as can cause but little pain or inconvenience. 2. Those guilty of serious offenses, on whom graver experiments are to be practiced, but in whom life is not to be risked. 3. Those convicted of the highest grades of crimes, in whom life is to be freely put in peril.

As already stated, the mind of Mr. Rusden is both humane and practical: humane, because, according to the new code, "no unnecessary pain shall be inflicted;" in fact, it will be generally indispensable to avoid it by means of anæsthetics; practical, since, he says, "a fourth advantage is the enormous reduction of cost in the final disposal of criminals which would obviously result; as all the worst criminals would be utilized for experiments involving so much risk or certainty of death as would speedily reduce their numbers. I believe that the present cost of disposing of criminals would be reduced far more than fifty per cent., and that the supply of subjects for experiment would soon fall far short of the demand." The euthusiasm of Mr. Rusden is quite contagious. We feel its influencé, and sincerely hope that the legislature or house of assembly of Victoria will not fail to give the stamp of actuality to his suggestion. We shall watch with interest for the passage of the needful laws, and then, if it be not too late, shall apply for a position upon the well-paid medical staff appointed to carry out its provisions. Let us trust that the time is not far distant when troubled visions shall no longer haunt the sleep of rabbits, dogs, cats, and their congeners.—*Phil. Med. Times.*

Anecdote of Nelaton.—A medical writer tells the following little story of the great French surgeon, Nelaton. Speaking of a visit to one of the Paris hospitals, he says: "As we passed into the hall we heard groans, evidently of a child in great pain. The door leading to the sick ward was ajar, and as we approached we heard the voice of a man talking earnestly with a little sufferer. There was something very affecting in the imploring tones of the child's voice and the tender and sympathizing replies of the physician, and it seemed to us no breach of etiquette to witness unseen through the crack of the half-open door the scene that was passing within. On a narrow pallet near the window lay a fine boy, nine or ten years old, dying of cancer, developing itself between the eyes and behind the nose. It had not shown itself externally, but had destroyed the sight, and was attended with excruciating suffering. By his side sat a stately white-haired man holding with one hand the two of the little patient, while with the other he caressingly smoothed his hair. The child told the story of his pain, '*Ah je souffre tant!*' to which the old man listened patiently, promising to devise some relief. Then he rose to go, but first bent over the boy, and with tears dropping from his eyes, kissed his forehead as lovingly as a mother. The white-haired man was the world-renowned Nelaton, lately summoned to attend the fallen Emperor."

Glycerin as a means of disguising Medicines.—We desire to call the attention of our readers to the use of glycerin as a means of disguising medicines, especially those of an oily nature. Some time since it was announced that if castor-oil be mixed with an equal part of glycerin and one or two drops of oil of cinnamon to the dose, it can scarcely be recognized. We have used this mixture a great number of times, and can confirm all that has been said of it. Children take it out of the spoon without difficulty We have given it to doctors without their discovering that they were taking castor oil.

In typhoid fever and other diseases in which turpentine is indicated, patients often object very much to its taste. The addition of half an ounce of glycerin to a six-ounce emulsion disguises almost completely the turpentine, especially if a drop of oil of gaultheria or of other volatile oil be added for each dose.

No doubt the principle is capable of wide extension. It is said that cod-liver oil may be disguised with glycerin and whisky; and Dr. Herbert L. Snow writes to the *British Medical Journal* that an addition of a small quantity of glycerin (about half an ounce to an eight-ounce mixture) will altogether obviate the sensation of astringency produced by the chloride of iron dissolved in syrup. —*Phila. Med. Times.*

Death of the distinguished Surgeon, Nelaton.—The death of Dr. *Auguste Nelaton* is announced in the cable dispatches. From a daily newspaper we clip the following notice:

"Dr. Auguste Nelaton, one of the most famous physicians of France, whose death has been announced in our cable dispatches, had completed his sixty-sixth year, having been born on the 17th of June, 1807. He was a pupil of Dupuytren, received his medical degree in December, 1836, and soon after became surgeon to the hospitals and a member of the Faculty of Medicine. In 1851 he was appointed Professor of Clinical Surgery in the University, and in 1856 was admitted to the Academy of Medicine in the section of Chirurgical Pathology. Originally decorated with the ribbon of the Legion of Honor in 1848, he passed through its various grades to the position of commander. He was chosen a member of the French Academy of Sciences in 1867, and soon after relinquished his professorship on account of feeble health. He was the author of several works on medicine and surgery."

The Musical Visitor.—We have just received the last issue of this acceptable *visitor*. It contains all the current art notes, and an abundance of music, criticism, and matters of interest to students of music. This reminds us of a pleasant visit recently to the great Exposition, where we found a remarkable exhibition of pianos, organs, etc., all in the line of the best class of piano instruments. For two years past we have had in our family a Weber piano, and with so much satisfaction that we have found no reason to wish for a change. We certainly were wonderfully impressed with the rare exhibition of piano and organ products that we found on exhibition, and we have no doubt our friends will find the store of John Church & Co. the very best place to make their purchases, either of music or musical instruments, and of these we especially commend the Weber piano as the purest-toned instrument we know anything about.

Vacancy Filled.—The board of physicians of the Children's Home, of which the late Dr. Cummins was a member, have appointed Dr. J. C. Hupp to fill the vacancy occasioned by Dr. Cummins' death. The directors of the Home have notified Dr. Hupp that they "heartily approve" the selection and request his acceptance, and the doctor has accepted accordingly. The board is composed of four physicians chosen from the oldest practitioners in the city, who give their services gratuitously.

The Academy of Medicine has resumed its sessions at the law-school room, in College Hall, Walnut street, between Fourth and Fifth, every Monday evening. We select some of its recent discussions for the present number, which we think will prove interesting reading. We may also say that physicians from abroad, visiting our city, are always welcome to the Monday night meetings, and the members will be glad to make the acquaintance of all such visiting strangers.

College of Pharmacy.—This flourishing institution, already a marked success, opens its third session Wednesday, October 8th. The faculty consists of E. S. Wayne, Materia Medica and Botany; J. F. Judge, Chemistry; and W. B. Chapman, Pharmacy. For circulars and information address the corresponding secretary, E. S. Wayne, Fourth and Vine, city.

Thanks for the Apples.—Some unknown friend at Medora, Ind., has forwarded us a nice and acceptable lot of apples. We would make our personal acknowledgments, but no name accompanied the note. Please tell us to whom we are indebted.

Why is a tom-cat like a surgeon? Because they both mew-till-late.

"*Two more Unfortunates.*"—Two of our friends, as will be seen below, have perpetrated matrimony; and thus, one by one, they drop out of the ranks of "blessedness."

Marriages.—Kearney—Miner—On Monday, the 15th instant, at St. John's Church, by the Rector, Rev. Dr. Davidson, Dr. Thomas H. Kearney to Miss Lavina Andrews, daughter of Judge John L. Miner.

Chapman—Best—On Sunday evening, September 14, 1873, by the Rev. W. A. Robinson, Mr. C. Bart Chapman to Miss Sallie E. Best, both of this city.

Dr. G. W. Bayliss, Professor of Surgery in the Medical University of Louisville and a prominent physician of that city, died Monday night, September 8th, at Rockcastle Springs, Ky., after a lingering illness.

Dr. Lyman Congdon, of Syracuse, formerly superintendent of the Willard Asylum, has been appointed superintendent of the Inebriate Asylum at Binghamton, vice Dr. Dodge, resigned.

A desirable Location for Sale.—No real estate to buy; horse, buggy, and office fixtures, in about $500; no competition; very desirable for a single man. Apply to Dr. E. B. Stevens, this office.

Henry Stewart Hewit, M. D., New York.—Dr. Henry Stewart Hewit, who died in this city on the 19th ultimo, was the son of the Rev. Nathaniel Hewit, of Bridgeport, Conn., formerly of Fairfield, where Henry S. was born on the 26th of December, 1825. He was also grandson of the Hon. James Hillhouse, of New Haven. When seventeen years old he entered Yale College, but leaving before the completion of the course, commenced the study of medicine with Dr. Valentine Mott, of New York, and took his degree of Doctor in Medicine from the Medical Department of the University of New York in 1847. For about six months he served as *interne* in Bellevue Hospital, and in the following year (1848) entered the United States Army as Assistant Surgeon, and was ordered to Vera Cruz, remaining in that capacity there, and in California, until the termination of the war with Mexico, and for three years thereafter. In 1852 he settled in San Francisco, Cal., where he practiced his profession until 1855, when he returned to this city.

At the outbreak of the war, in 1861, Dr. Hewit again entered the United States service as Brigade Surgeon, and from 1862 to 1864 was attached to the staff of General Grant as Medical Director of the Department of West Tennessee and Mississippi. In 1863 he was taken prisoner, and was for one week in captivity in the Libby prison at Richmond, when he was exchanged and sent North in charge of sick and wounded prisoners, without parole.

In 1864 he took charge of No. 5 General Hospital, at Frederick, Md., where he remained until 1865. With the termination of the war he resigned his position and resumed practice in New York city. During the latter part of his service he was raised by *brevet* to the rank of Colonel.

When the Charity Hospital was reorganized in 1866, Dr. Hewit was among the newly appointed visiting physicians, and continued in the discharge of his duties until the occasion of his last visit, two days before his death.

In 1866 he resumed his charge as Visiting Physician to the House of the Good Shepherd, to which he had been appointed in 1856, and in 1867 he became Visiting Physician to the Home connected with St. Stephen's Roman Catholic Church. In 1872 he was appointed one of the Clinical Professors of Surgery in the Medical Department of the University of the City of New York, and at the time of his death was Vice-President of the Alumni Association of that school, Member of the Pathological Society, of the Academy of Medicine, of the Medical Library and Journal Association, and of the Physicians' Mutual Aid Association. He was also Consulting Surgeon to the Central Dispensary.

His death occurred very unexpectedly. At six o'clock P. M. of the 19th, he was at the University. Returning home, he complained of feeling unwell, and immediately after dinner retired to his room and went to bed. Not long afterward his stertorous breathing attracted the attention of the family, and without recovering consciousness he died at half-past eleven o'clock the same evening, of apoplexy.—*Medical Record, N. Y.*

Reviews and Notices.

A Guide to Urinary Analysis. HENRY G. PIFFARD, A. M., M. D.

This book purports to be for the guidance of the physician and student in the investigation of the urine. In our opinion, it is not at all adapted to the use of either; in fact, we regard it as a very incomplete and altogether unsatisfactory work. Of the eighty-eight pages which compose it, thirty-two are devoted to the subject of quantitative analysis. Now, those who have made quantitative analysis, even by the comparatively easy volumetive method (the one principally referred to in this volume), know that great care and some skill are necessary for a correct result: so much so that but few physicians will be willing to give the time and care necessary to attain this. But even in this department of his subject, although it is treated of somewhat at length, the author is not always sufficiently particular; as, for instance, in testing for urea by Liebig's method, he omits to direct that the strength of the mercuric nitrate solution be established by its reaction with a standard solution of urea, a proceeding which is necessary for accurate results.

Although this large proportion of the book is given up to quantitive analysis, not a word is said in regard to urinary deposits—a subject certainly of more practical importance. Not an illustration is given representing the microscopical appearances of crystals, etc.; indeed, the microscope is entirely ignored as a means of investigation. No mention is made of the simple chemical manipulations, by which many of the sediments may be distinguished.

These omissions struck us the more forcibly, as six pages are devoted to the detection of iron, lead, and mercury, which is of comparative unimportance.

On the whole, having already much more satisfactory treatises and hand-books on the urine available, we can not recommend the present one either to the student or physician.

J. C. M.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

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Original Communications.

Art. I.—Milk Sickness.

By A. FULTON, Bellefontaine, Ohio.

Notwithstanding the great diversity of opinion in reference to the *cause* of this peculiar disease—no vegetable or mineral having yet been unmistakably identified as the guilty agent—yet all agree, with united voice, that it is a specific poison, producing a disease *per se*. And the agreement is as unanimous that it is *endemic*. And, although there are frequently cases of the poisoning, and even deaths, far from milk-sick districts, which the physicians, where they occur, may not understand, or know what to call, or how to treat, yet the poison was obtained in those localities, and transferred to its place of destination in meat, butter, or cheese, and there received into the system, and produced its results.

But as to whether the specific virus is of vegetable or mineral origin, there is no agreement, each having about an equal number of adherents; and each, generally, being founded in his belief either from preconceived opinion of his own, or the accidental opinion of the neighbors, positively and perseveringly asserted, without his taking the trouble to inquire into and investigate all the ascertainable facts connected with the case.

The vegetable theorists, whether in favor of white snake-root, lobelia, poison oak, or what not, do not claim, excepting some of the most reckless observers and asserters, that they have seen the disease produced, in either man or beast, by the administration or voluntary use of their favorite article. That there have been instances of poisoning by all these articles, and also by the buckeye and other vegetables, there is no doubt; and that, too, with many of the symptoms of milk-sickness. But that the *tout ensemble* of symptoms necessarily and invariably accompanying it, and which, taken together, unmistakably characterize the disease, is, by the mineral theorists, positively denied.

On the other hand, neither do the mineralists claim that they have or can produce the disease by administering any of the minerals that they hold to be the guilty agents. But they do claim that they have many satisfactory instances of cattle, and persons also, taking it from water, whatever article that water may have been impregnated with. As, for instance, the case given by Dr. White, in the *Transylvania Journal of Medicine* for 1836: "A respectable farmer informed me that his cattle had been in the habit of frequenting a pasture-ground in company with his neighbor's, on the opposite side of the creek from him. In returning home, his cattle were obliged to cross the creek. For many years not a case of the disease appeared among them, while his neighbor lost some forty or fifty during that time. The animals of the latter did not cross the creek, but drank at another stream. Both herds ranged the same woods and fed on the same herbage. It is presumable, therefore, that the disorder was produced by the water; and, in confirmation of this opinion, this individual further stated to me, that, suspecting a spring, at which his cattle drank, to be the origin of the evil, he set to work felling trees around it, so as to exclude his stock from it, and that afterward they suffered no more with the disease for several years. At length, however, it recurred again; and, on examination, it was found that the spring had become accessible from the decay of the timber. The inclosure being repaired, and the cattle shut out from the water, the disease a second time disappeared."

And many similar instances could be cited, some two or three of which have fallen under my own observation. One in Richland township, Logan county, Ohio, where the cattle had been taking the disease from the first settlement of the country, and several persons, on that and adjoining farms, had taken it, and most of them had died, until a spring was finally suspected and inclosed. Since which time to the present, some fifteen years, there has been no more of it.

Another, that of a low, marshy piece of ground, in Rush Creek township, of the same county, the country around which was notorious for the number of cattle that died of the disease, and of persons that took it; until, with the improved agriculture of the country, that place, with other low lands, was ditched and drained. Since which, there has been no more of the disease in that neighborhood, in either man or beast.

Another instance, that of a stock-well on a farm in Clark county, Ohio, as I am informed by several credible witnesses. The cattle were accustomed to be watered from this well, and had been taking the disease for a number of years, when it was suspected and closed. Since which there has been no more of it.

Again, there is a farm in Hardin county, on which members of every family that has ever lived there have had the disease. On that farm I have attended patients who said that they had not used meat, milk, butter, or cheese for weeks, thus guarding against the disease. The presumption, therefore, was that they, and also those of the previous families that had lived there, had obtained it directly from the water.

And thus I might enumerate many more similar instances, upon which the mineral theorists found their belief, without naming any article, either elementary or compound, believing it to be a thing yet to be discovered. These facts militate equally against the zymotic or malerial theory.

Inception.—The *stadium prodromorum*, or period intervening between the first impression of the morbific cause, or the reception of the virus, and the actual outbreak of the more violent phenomena of the disease, varies greatly in length, from one day to weeks, or even months, depending upon the amount of the poison received, the susceptibility of the person receiving it, the toxic property of the virus, and the habits or occupation of the recipient. If the person is of sedentary habits, not engaged in any occupation that requires much muscular activity to excite the heart or heat the system, he may receive and have a large amount of the poison lie dormant in his system for a long time without any visible signs of its presence. But let him labor hard, or take any violent exercise, till he heats himself, and the pathognomonic phenomena of the disease will immediately show themselves with terrific violence, the most notable of which are overwhelming sickness of the stomach, with violent vomiting and obstinate constipation of the bowels.

Every physician, or other person, conversant with the disease, is perfectly familiar with the fact, that the poison may lie dormant in the system, in sufficient quantity, when the proper condition presents, to explode with terrific violence, without showing any signs of its presence, till it is, so to speak, ignited by active exercise or heating of the person. For instance, where persons, as is frequently the case, receive the poison *en toxicon deemon*, in a poison district, and afterward go into a neighborhood where the disease has never been known to have been, and upon being heated by hard labor, are taken down with the disease, and the physician is called a fool, and perhaps turned off, for naming it milk-sickness, "for," say they, "we don't have that disease here."

Or, as is more frequently the case, where cattle are bought in a poison district, *apparently* all right and healthy, but upon being run, in driving them home, immediately take the "trembles," and perhaps are never gotten home. Or, as is very generally the case, where the sucking calf takes the disease, while the mother, in whose system the poison was, shows no signs of the disease. Or, again, as in the case recorded by Dr. F. H. Sale, of Indiana, "a young calf took the 'trembles' and died. The cow was milked, and the milk fed to two pigs that were in a pen. The pigs thrived and fattened, and in due time were slaughtered. The first meal that the man and his wife (owners of the pigs) took, made them sick, and they both died in four days after eating the pork, with all the symptoms of milk-sickness. *Neither cow nor pigs showed any sign of the disease.*"

Symptoms.—The group of invariably accompanying symptoms, which, in common language, constitutes the disease, do not, in the main, differ from those of the febrile diseases. But there are *some* that are truly *diagnostic*, and *so marked* that there need not be any danger of mistaking it for any other disease.

The general symptoms are derangement of the nervous system, producing mental and muscular languor, general *malaise* and uncomfortable sensations, confusion and weakness of the intellectual powers, tremors of the extremities, changed expression of the countenance, and nausea, and, in the active state, the *most terri-*

ble sickness, described by those who have experienced both, as more heart-depressing, hopeless, and unendurable than that of sea-sickness. This sickness is partially relieved, for a few moments, after vomiting. The vomiting recurs so frequently, so violently, and so unmitigatedly, that it is well nigh an impossibility to have medicine retained long enough to take effect. After continuing for a length of time, if not prevented by the use of alkalies, the ejections assume the coffee-ground appearance, like the vomito, or black vomit of yellow fever.

Another symptom of this disease, most prominent to the eye of the common observer, is the state of perfect *inactivity of the bowels*. or obstinate constipation, which, if counteracted, and continued to be counteracted, the disease is cured. This, as will be shown hereafter, we believe to be the cause of the vomiting, and symptomatic of the true pathological condition of the organism.

There is a peculiar *smell* connected with the disease, which is considered by most observers as pathognomonic. Dr. Dawson, of Greene county, Ohio, in giving the prominent symptoms of the disease, says: "As a premonitory symptom, a peculiar and indescribable *fetor* from the lungs is the most prominent; and so universally have I found it present, and to precede the disease, that in almost every instance where I have been brought in proximity to a person predisposed or attacked, I have been able to foretell its approach and pronounce the character of the disease."

Dr. J. Newland Smith mentions "*a peculiar odor of the breath*" as a characteristic symptom of the disease.

Dr. B. S. Brown, of Bellefontaine, Ohio, says: "There is an odor, *per se*, attending the disease, as easily distinguishable as that of garlic." And this is the almost universal testimony of those acquainted with the disease, both professional and unprofessional.

The *great tolerance of cathartic medicines* is also a characteristic feature of the disease. Some other diseases, and certain conditions, will occasionally bear a great amount of cathartics. But milk-sickness invariably tolerates and requires, to one not acquainted with the disease, an almost incredible amount of cathartics. I have known patients to take and retain from fifty to seventy doses of physic, in about twice that number of hours, each dose sufficiently large to purge a man under ordinary circumstances, and also, during the same time, receive a great many large and active enemeta, and yet not be very freely physicked.

There is another peculiarity connected with the disease, which, to me is diagnostic. I mean the *moan* of the patient. Yet I have not seen it named by any other person. To my ear it is a moan so peculiarly *per se*, that I think it is as distinguishable as the cough of croup. They are other affections in which patients moan as much as they do in this. But there is a peculiar tone of woe-begoneness and despondency connected with the milk-sick moan, which gives feature or physiognomy to it, that is easily recognizable after having once heard it. And yet I can not describe it in words, so that one not acquainted with it would know it upon first sight. To be known it must be heard. I think that I can diagnose the disease upon hearing the moan, without seeing the patient.

The *decubitus* of the patient, especially after the case becomes bad. is peculiar: an indifferent stolidity of countenance, a drawing forward and downward of the head and shoulders, so as to lie partially across the bed, with the head hanging over the edge, and the clothes drawn forward and up, so as to leave the feet uncovered.

I will mention one other pathognomonic, or at least invariably accompanying symptom, viz., *a collapsed condition of the abdomen.* This is a necessary consequence of the pathological condition of the viscera, as will be shown further on. At least it is present in every genuine case of the disease, to a greater or less extent. In the majority of cases, the caving in is so great that the pulsation of the abdominal aorta can be seen, or plainly felt, as low down as the pelvis. When the collapse is not so perfect, it will be found that it will take more cathartic medicine to relieve the patient, owing perhaps to the greater accumulation of fecal matter, at the invasion of the disease.

I will recapitulate, that you may have a condensed or birds'-eye view of the symptoms peculiar to the disease: 1. Frequent and persistent vomiting. 2. Coffee-ground, or black vomit. 3. Obstinate constipation. 4. Peculiar odor. 5. Remarkable tolerance of cathartic medicines. 6. Peculiar woe-begone moan. 7. The decubitus. And 8. The collapsed condition of the abdomen. All which, when taken together, constitute a physiognomy of disease, which is easily and unmistakably recognized after having once seen it.

Diagnosis.—The diagnosis of the disease, as I have before intimated, is not at all a difficult matter; yet it is very difficult, if not impossible, to point out, in words, the precise difference between any one symptom in this and the same in any other disease. But taken collectively, in the same case, with their relative connections and bearings, one upon another, and he must be poor in individualizing who can not, without difficulty, recognize it. I have often been asked if I was *certain* that it was milk-sickness; if it might not be something else. I have answered, that if it was *not* that, I did not know what it was; that I knew that it was not any other disease that I had ever seen or read of.

But, fortunately, the symptoms are so marked, and the indications to be fulfilled so plain, that though one may be slow in *naming* the disease, yet he need not be at any loss in making a rational prescription.

Pathology.—And this leads me to speak of the pathology of the disease. The first morbific impression of the poison is undoubtedly upon the nervous system, as is manifested by the common premonitory symptoms, as enumerated above. But the special and specific action, as I believe, is upon the ganglionic system, the source of the organic functions and of all animal life. As the brain and its prolongations, the cord and nerves, are the fountain and viaducts of mentality and sensation, so are the ganglia and their ramifications the seat and avenues of life and procreation, controlling the secretions, nutrition, circulation, and the involuntary motions. If, therefore, the solar plexus and its system of ganglia should become oppressed or paralyzed by a specific poison, or any other means, the symptoms we would expect, *a priori*, would be very similar to those of milk-sickness. The involuntary peristaltic action of the intestines would cease, and constipation would be the necessary consequence, especially after the lacteals and lymphatics had taken up their liquid contents. And it would be *persistent*, until that action would, partially at least, be restored. And that is just the milk-sick condition.

Again, the vital stimulus that causes the peristaltic motion being removed, the intestinal muscles, in that respect, would be paralyzed, and the spinal nerves, still having their functions unimpaired, would cause them to contract and close the caliber of the bowel. And that contraction and closure would continue so long as the ganglionic stimulus was withheld. And here, again, is the precise milk-sick condition. In autopsies made by myself, on animals killed for that purpose, that had the disease, I found the small intestines contracted so closely that they appeared like a large lumbricus their whole length. And I suppose that the large ones would have been in the same state, but that they were impacted with dry feces, so that they could not contract.

I find that this corresponds very nearly with a report of the examination of a body, dead from milk-sickness, made by Dr. J. V. Wagman, of New Castle, Indiana. He says: "The brain and its membranes exhibited nothing remarkable; the kidneys, bladder, heart, and lungs were sound; the duodenum, as well as the lower part of the stomach, was *much contracted;* the cæcum was dry; and the colon, containing hardened feces, on which it contracted closely, was drier than other portions of the tube," etc.

This being the state of affairs, the bowels contracted into the least possible bounds. The consequence would be a collapse of the abdominal parietes, spoken of before, as a distinguishing feature of the disease.

The action of the bowels being thus stopped, we would also expect that the stomach would take on reversed action, as in ileus, intussusception, strangulated hernia, etc.—nature's effort to relieve those conditions. And this, also, we find to be prominently true in milk-sickness. So that, from a partial paralysis of the organ of life—the ganglionic system of nerves—we would expect *all* the symptoms that the disease presents; just as, from *complete* paralysis, wewould expect death.

My theory, therefore, of the pathology of the disease is, that it consists primarily in a depression of the powers of the *ganglionic system of nerves;* and secondly, or immediately, in a *tonic spasm*, or continuous spastic condition of the *intestinal muscles.*

This theory is *confirmed*, not only by autopsies, but also by the fact, that those means that will relax that spasm and continue the relaxation are the best remedies for the disease; such as the warm bath, or bleeding, etc., to syncope, where there is sufficient vital stamina remaining; and then keeping up the relaxation by cathartics, *et cætera.*

Treatment.—The treatment consists in sedatives, relaxants, cathartics, enemeta, etc., judiciously and perseveringly applied. Each practitioner will have his preferences, in making his selection of articles from these different classes of medicines. Some may be more fortunate than others in their choice. I have my preferences. And I may say, that in a thirty years' practice among it, I have been so fortunate as not to have lost a single case of my own attending.

I said above, that the means must be *perseveringly* applied. If one dose is rejected, another must be given, and that, "not until seven times only, but until seventy times seven."

Art. II.--Singular Case of Labor.

By M. ROONEY, A. M., M. D., Quincy, Ill.

On the evening of November 16, 1872, I was called upon to attend Mrs. M. in her first confinement. Mrs. M. was a native of Germany, age about twenty, and of delicate formation. She had been in labor for several hours, and the waters had broken four hours previous to my arrival. Upon digital examination the vertex was found presenting, the head well down, occipito-anterior, not completely flexed. I endeavored to produce entire flexion, but did not succeed. The pubic arch of the woman in labor was found to be somewhat contracted. The soft tissues immediately beneath the arch were much greater in volume than is usually the case, and they presented to the finger a wormy feeling, indicating a varicose condition of the vessels.

Whilst the labor was progressing, I did at times make efforts to push back into the pelvic cavity the mass of the soft tissues, though my attempts were fruitless.

The mother several times in her labor expressed apprehensions as to her getting through safe. It seems that she had, even before her labor began, given expression to the idea that her labor would terminate unfortunately. The uterine contractions were not powerful, and for that reason I gave wine and ergot.

Having remained ten hours with the woman, and knowing that the labor progressed but very little and that the mother's powers were flagging, I came to the conclusion that it would be necessary to use the forceps in order to save both mother and child.

I proposed a consultation, but Mr. and Mrs. M. were opposed on account of the necessary attending expense, and they requested me to proceed unaided. Hodge's forceps were used; they were easily applied and locked quite readily. In a short time I delivered the child alive, which lived till three weeks old, and then died of variola.

Immediately after the delivery, I noticed a considerable quantity of venous blood escaping from the vagina. Having severed the umbilical cord, I introduced my hand into the vagina and partially into the uterus, grasped the placenta and removed it. Good contraction of the uterus took place, but the hemorrhage continued. Though the contraction was good, I thought that a clot in some portion of the uterine cavity might allow the hemorrhage to continue. With this idea, I reintroduced my hand into the uterus, but found only two insignificant clots.

Again good contraction took place, yet the hemorrhage did not, in the least, cease. I now concluded to make use of the tampon and external pressure. I had nearly completed the operation of plugging, when I noticed that the hemorrhage gushed over the tampon. Upon examination, I found that the blood proceeded from a point between the meatus urinarius and clitoris. Digital compression of the part against the pubis at once, and completely controlled the flow of blood.

In the meantime, I sent for aid and kept up compression till it had arrived. By the use of acupressure the hemorrhage was stopped.

The woman had lost quite a quantity of blood; she was much blanched, but had not at any time become unconscious. While the loss of blood was taking place, I had the head kept low, made use of cold water, gave large doses of wine and ergot, under the impression that I had a uterine hemorrhage. Upon examination, the urethra and all the soft tissues were found to be uninjured, excepting the point mentioned between the urethra and clitoris. Mrs. M. was much depressed; her respiration was rapid; pulse 132; skin cold and clammy. External dry heat, alcoholic stimulants, milk, beef-essence, etc., were used freely.

Twenty-four hours after delivery, Mrs. M. seemed to be in a favorable condition, considering the case. She evinced considerable interest regarding her child; her pulse and respiration were much improved, and her skin was warm. The consulting gentleman, Dr. Curtis, and myself felt much encouraged in regard to the future prospects of the case. But in the afternoon of that day respiration became labored, pulse rapid and weak, there was much jactitation, and in the evening Mrs. M. was no more, dying from embolism or directly from loss of blood.

Looking back to the case, I can now easily see that I should have known that the hemorrhage did not proceed from the utero-placental locality; for, in that case, the blood would have been arterial and not venous. But in the heat of excitement, every one is not certain to use the amount of reason that he does in cooler moments and when no dangers threaten. In reading some appended cases, it would seem others have made the same mistake; for they made use of plugging, and this was done with the intention of preventing uterine hemorrhage

Some may suspect that the forceps or undue force was the cause of the rupturing of the vein. The location of the lesion, between the urethra and clitoris, precludes the former suspicion, and that the force was not excessive I feel certain.

I think that if the woman herself were capable of completing the labor, that still the rupture would have taken place.

We may be permitted to suppose that the vessels in the region ruptured were diseased. If this be allowed, is it too much to say that they were diseased in a high degree and to have required but a slight amount of pressure to sever their continuity?

The friction pressure of extension on the soft tissue beneath the pubis could, in natural labor, produce such rupture in a diseased condition of the vessels of the part.

I have read of no such case as the one I report, though fatal cases of hemorrhage are reported as occurring during pregnancy, though not in parturition, from varicose veins in the region of the clitoris.

M. Depaul says that a young woman received a *small* wound in one of the labia majora, from which the hemorrhage proved rapidly fatal. A varicose vein was involved, and an injection into the vena cava inferior flowed away in a stream from the small wound.

He cites another case: Hemorrhage occurred in a woman eight months pregnant. Utero-vaginal plugging (I suppose on the supposition that it was uterine hemorrhage) was practiced, yet the hemorrhage continued. In examining with great care the external organs of generation, M. Depaul discovered a small, black spot near the sheath of the clitoris. Punctated cauterization was used, the hemorrhage ceased, and the woman was delivered without accident a month later.

For quite an interesting article, from which these extracts are taken, see page 239, Vol. LV, Half-Yearly Abstract of the Medical Sciences.

Churchill, Diseases of Women, 1857, says, that the Monthly Journal of Medicine for February, 1850, presents some interesting remarks on the occasional occurrence of fatal venous hemorrhage from the inner surface of one of the labia. Dr. Kyle, Dundee, Scotland, was called to see such a case, but when he arrived, the woman had expired. She was pregnant and straining at stool when the hemorrhage took place. Dr. Watson has recorded, in the Ed. Med. and Surg. Journal, three fatal cases of such hemorrhage.

Dr. Seller has reported some cases.

Dr. Simpson says that five or six cases have been before the Scottish courts as criminal cases, but he was not aware that the plea of spontaneous rupture had been made. Dr. Candie mentions a case of hemorrhage from the labial regions at the seventh month, but it did not prove fatal.

Dr. T. G. Thomas, without giving any case of his own, says that the *predisposing* causes of pudendal hemorrhage are pregnancy, a varicose condition of the veins, and pelvic tumors. The *exciting* causes are great muscular efforts, blows rupturing labia, incisions or punctures, passage of the child's head, and delivery by the forceps.

What I have given here is all that I have been able to find upon hemorrhage from the pudendal region. Though the cases mentioned by the authors cited, are not quite like mine, since they did not occur in delivery, yet if I had read of them, I feel that I should have discovered the source of the hemorrhage before I did, and that my case would have turned out more fortunate than I am able to report.

I give this case publicity, both on account of its rarity and of its great importance.

Art. III.—A Petrified Child.

By GEO. H. RUSSELL, M. D., Cheyenne, Wyoming Ter.

Prof. Hayden, with a party, under the auspices of the Smithsonian Institute at Washington, and a party from Yale College, have been rambling over this country for the last few years, in search of curiosities, and many are the wonders which they have unearthed. By no means the least among their curiosities are specimens of petrification, petrified wood, petrified horns, petrified honey-combs, hoofs, hearts, shells, fishes, etc. Some three years ago, a child, four years of age, during an epidemic of rubeola in this town, died from the sequelæ of this disease. The family physician who conducted the case through its various stages to the last one, was an old and successful practitioner, but by some means the medicine for the child, who was yet quite low, came one morning with the following directions: "Take a teaspoonful every hour." A teaspoonful of this medicine contained pot. iodid. ʒi. The doctor claimed that, instead of ʒi, he ordered gr. i. Soon after giving the first dose, the parents became alarmed and sent for me. Three days after that, the child died, and was buried here in Cheyenne. Two years passed away, and the parents, who had moved to Denver, Col., sent to have the child taken up and forwarded to them. On removing the cover from the coffin, I saw there that same little child, whom I recollected well, turned to stone, perfect in every part, not even a feature missing, and the most scientific, imaginative, and artistic sculptor could not fashion a child so near to perfection. There it lay just as it was placed by its broken-hearted mother; its little arms folded across its breast, and every finger in place. There was no discoloration, no offensive odor, and no mold; but it was as pure and as white as the drapery in which it was dressed for interment: even the ladies, whose curiosity led them to see it, timid and fastidious as they are, were in raptures over this "Greek Slave." Whether the parents buried it again or not I am unable to say, but they intended at that time to preserve it.

This remarkable case of petrification may seem strange and incredible, but the facts concerning it are as above stated.

Such rapid petrification, for rapid it must have been to preserve those innocent smiling features, must be owing to peculiar elements in the earth or atmosphere, or in both.

It is and has been for years a common expression among the old plainsmen and mountaineers, that a quarter of beef in the hottest weather, if hung up in the sun, will not spoil, but *cure*. We are about six thousand feet above the level of the sea; hence the atmosphere is rare: it is also dry, pure, and healthy. Should I write a list of the spontaneous expressions heard daily from the lips of the happy asthmatics, who, after years of suffering, struggling for breath to keep themselves alive, and undergoing almost the tortures of the damned, until they are tired of life and anxious to quit it, they finally leave home in search of some place where they can live, and arriving here they begin to breathe freely, their lungs open, and the pure mountain air rushes in, and they are suddenly the happiest mortals alive.

I say, should I write a list of the expressions I hear from such people, it would fill a large and not uninteresting volume.

One poor old man, who had paid out thousands of dollars, and been nearly killed with drugs—who had tried every nostrum, every charlatan, and every doctor who he had heard "could cure asthma," with no benefit, and finally had come here, and was standing with me, one day, soon after his arrival, in front of my office, said, "Oh! why do n't the whole world know it! I am going to write to everybody to come out here where they can breathe."

Some six months since another child was exhumed, in which the process of petrification was about half completed.

"This is an alkali country" is a common expression here, and there are localities not far away where the alkali dust is several inches thick, and where, after walking across the road, one's boots will be white instead of black. There is also a large iron mountain near here; in fact, this is a country of metals and minerals, which probably accounts in some measure for the rapid petrifaction so common in this region.

Art. IV.—A Case of Extrusion of the Bowels.

Reported to the Zanesville Academy of Medicine, by J. R. LARZELERE, M. D., Zanesville, Ohio.

August 17, 4 o'clock P. M. Mr. B. was gored by the horn of a bovine, in the right iliac region, midway between the inferior spinous process of the ilium and spine of the os pubis. the horn striking an inch below the crest and gliding immediately over the pubic bone and into the abdominal cavity, admitting slight extrusion of the bowel, after which he walked seventy-five yards in order to reach his house. Having laid himself down on the bed, a slow messenger was dispatched for medical aid. Shortly after assuming the horizontal position, the patient experienced a feeling of nausea, which soon eventuated in emesis, and extrusion, apparently, of about all the small bowels belonging to his body, seemingly a mass lying upon the exterior of the parietes of the abdomen, abont the size of a man's head. In this condition they (the extruded mass) remained uncared for, during three hours, with no covering, save the patient's shirt, and that saturated with blood and water. Eight o'clock, four hours after receipt of injury, I found him as above described, which to a medical man, unaccustomed to witnessing the ilium and jejunum dangling on the opposite side of their nativity, was, to say the least impressive, as to the vis medicatrix natura of such freaks of itinerancy in abdominal structures.

The bowels were first carefully examined, relative to lacerations, contusions, or other injuries; but not observing any such, other phenomena were looked after. The reduction of temperature, though not tested by the thermometer, was thought to be quite marked. The arterial distributions being objective, were known to be congested to their utmost; also, their color was manifestly livid. About a teacupful of effused blood lay without and through the extruded mass. On further investigation, it was found that the direction of the wound was oblique, the obliquity being from without and toward the linea alba. Not having any chloroform on hand, he was given, gr. ⅓ sulph. morphia, and efforts at reduction immediately commenced, with much assurance of speedy success; but in this disappointment was experienced, mainly owing to the smallness of the wound, which would only admit the size of the index finger, also the distention from gas within the bowels. With these conditions, not finding the efforts at reduction likely to prove successful, the parietes of the bowels were punctured a score or more times, with a common-sized cambric-needle, which gave vent to the retained gas or gases, and greatly facilitated reduction, which was readily accomplished. The wound was united by two interrupted sutures, compress and bandage applied, and gr. ⅓ sulph. morphia every fourth hour. No food, but strong infusion of cold store tea for drink.

August 18, 9 o'clock A. M. Had two or three short naps during the night. Pulse 85, temperature 100. No swelling, and but little tenderness over abdomen; has passed urine. Treatment: Remove bandage and compress, and apply cold-water dressings to wound. Give grs. iss. opium every six hours. No food; continue cold tea for drink.

8 o'clock P. M. Symptoms much the same as morning visit; continue the same treatment.

August 19, 9 o'clock A. M. Rested quite comfortable through the night. Temperature 102; pulse 90. Some headache; slight tenderness over abdomen, but no distention; has passed urine. Treatment: Continue water dressings to wound, and grs. iss. opium every six hours. No food; take cold tea for drink.

August 20, 10 o'clock A. M. Fifty-eight hours from date of first visit, during which patient has taken sulph. morphia grs. i⅓, and grs. viii. of opium; passed a good night; feels cheerful.

Temperature 100; pulse 80; has voided urine. Treatment: Carbolic acid water dressings; discontinue opium, but if pain should occur at any time, give gr. i. pill of opium. No food; cold tea for drink.

August 21, 10 o'clock A. M. Did not rest so well during the past night; has some pain in head; bowels as yet unmoved; pulse 65, and wanting volume—thought to be attributable, partly at least, to the total abstinence of food, for as yet he has had none. Tenderness and tympanitis of abdomen but trivial. Treatment: An injection composed of tepid water, castor-oil, and salt, and per oris, elix. val. ammon. and quinia, two teaspoonfuls three times a day (the latter remedy was suggested by an able member of this "Academy"); carbolic acid water dressings to wound. The sensation of hunger is beginning to annoy the patient, for which milk is ordered. If pain or much uneasiness is felt at any time, give gr. i. of opium.

August 22, 9½ o'clock A. M. Sleep much interrupted through the night, mainly owing to his little son having had a convulsion of five hours' duration, in the early part of the previous evening. Pulse 65 and depressed; subsequent to the injection, the bowels were promptly acted upon, but one stool however. Treatment: Carbolic acid water dressings to wound; elix. val. ammon. and quinia same as yesterday. For food, milk and stale bread; also, tea or coffee, if desired.

August 23, 10 o'clock A. M. Is laboring under nervous depression, induced by parental grief, in the loss of his little son, who died at 4 o'clock this A. M.; symptoms otherwise good. Treatment: Remove sutures from wound, and apply adhesive straps; omit carbolic acid, and dress the wound with cloths wet in cold water. Two teaspoonfuls of elix. val. of ammon. and quinia, every four hours, and gr. ⅛ sulph. morphia at bed-time. Can take more food, such as mutton, lamb, or chicken-broth well seasoned.

August 24, 10 o'clock A. M. Sleep much broken through the night. The obsequies of little son, which took place at 9 o'clock this A. M., was endured with Christian composure. Symptoms good, save only as they are influenced through grief. Treatment same as yesterday; take more food, and a temperate quantity of any such as may be desired.

August 25, 4 o'clock P. M. Is feeling much better; bowels have moved without any assistance; every condition bidding fair for a speedy recovery. Appetite good; is permitted to eat temperately of good food. No medicine. Applied bandage and compress, and left him sitting up in bed.

August 27, 5 o'clock P. M. Found patient sitting up in a rocking chair, and free from pain or other uneasiness of any kind, except when an effort at walking is attempted, which he says causes his legs to feel numb, and a sensation allied to that of numerous fine needles pricking here and there through the muscles of locomotion. Treatment: Tighten bandage over compress, and ordered to make gentle motion of limbs and body. Food in temperate quantities.

September 1, 3 o'clock P. M. Rode in a carriage from his residence, five and a half miles, to my office. Feels grateful for the medical services rendered, and is desirous to cheat the doctor out of any more visits. Treatment: Remove adhesive straps, and apply fresh ones; started him homeward, with directions to be careful in his rural circumambulations, and come again and see me within the coming week.

Medicines Subject to Stamp Tax.—In a letter to Supervisor Alex. P. Tutton, of Philadelphia, the Commissioner of Internal Revenue states that "medicines and medicinal preparations, to be exempt from the stamp tax, must not be patent or proprietary. They must not be put up in a style or manner similar to that of patent or proprietary medicines. They must not be advertised as having any special proprietary claim to merit, etc. They must not be sold or offered for sale, or advertised under any other name, form, or guise than that demonstrated and laid down in the authorized published medical works or journals."

Whoever departs from these plain and simple rules in making, preparing, recommending to the public, and vending, or offering or exposing his medicines, etc., for sale, has no claim under the law to exemption from the stamp tax.

Water of All Flowers.—An ancient formulary of the seventeenth century has this prescription, which was to produce a "Water of All Flowers" (Aqua Florum Omnium). The process adopted is remarkable for its simplicity and logical accuracy. "Send a cow into a meadow full of flowers; when she has eaten all the flowers, gather the dung, distill it, and you have water of all flowers."

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE.

J. H. TATE, M. D., PRES'T. J. W. HADLOCK, M. D., SEC'Y.

CHELOID TUMORS.

Dr. Juler, from the Section on Skin Diseases, read a report of a case of cheloid, simulating *moluscum fibrosum.* The subject of this disease, an inmate of the Cincinnati Hospital, had been presented to the Academy some months since through the kindness of Dr. Miller of the staff, and an opportunity given the members to examine this rare and interesting case. Dr. Juler presented engravings representing the appearance of the disease, and also sections of the tumors under the microscope, which gave additional interest to his paper.

Dr. Ludlow reported a case of intermittent fever, in a patient thirty-three years of age, in which the paroxysms were preceded by convulsions in place of the chill. The febrile and sweating stages were as usual. He gave quinia freely for several days without interrupting the paroxysms. He then gave bromide of ammonium, when the disease yielded readily.

Dr. Walker related two cases of intermittent fever, in which there was no chill, but in its place severe vomiting. The febrile and sweating stages did not differ from ordinary cases. The disease yielded to the ordinary anti-periodic treatment.

SKIN GRAFTING.

Dr. Whittaker reported a case of obstinate varicose ulcer of the leg in a female, treated by transplantation of skin with success. The ulcer was of long standing, with indurated bluish edges, covering a large surface. It had been subjected to different methods of treatment, including strapping, bandaging, and rest, without success. He transplanted four or five pieces of skin in the usual manner. At the first examination he found that they showed signs of living, and a pellicle formed radiating from the several centers, till in six days the entire surface was covered, and the case now promises to be a complete success. He had never succeeded in transplantation before.

Dr. Murphy said it was doubtful how much was due to the strapping, rest, and position, in Dr. Whittakers case, and how much to the transplantation. He did not think varicose ulcers could be cured permanently while the veins remained dilated. They could be healed by rest, strapping, etc., but will return again upon exercise or the slightest injury.

Dr. Whittaker replied in proof that the cure did not depend on the strapping, etc.; that all these measures had been diligently employed before without success; and that healing, when it did take place under such treatment, required a much longer time than transplantation, which in his case was very short.

SYPHILIS.

Dr. Murphy reported a case of intractable constitutional syphilis, that had been under treatment twenty-five months without being able to remove the disease, or produce the constitutional effects of mercury. He had taken all the different preparations of mercury, and is now taking four mercurial baths a week. He withdrew the mercury for seven weeks at one time, and gave iodide of potash, but the patient got worse, when he resumed the mercury. He is now taking mercurial baths and iodide of potash, but the eruptions still persist. He does not know any other way than to persevere.

Dr. Ludlow said that nine months ago a man presented himself with a well-marked Hunterian chancre. He treated him during the primary stage with iodide of potash, but in six weeks constitutional symptoms presented, and he had eruptions on the body. He finally put him on the use of the protiodide of mercury and calomel in unctions, when the chancre healed and the eruptions disappeared, and the patient is getting well.

DEATH FROM CHLOROFORM.

This accident occurred during the reduction of a dislocation by Dr. N. P. Dandridge, who gave the following history of the case: On entering the surgical ward of the Cincinnati Hospital on the morning of the 24th, I found a German named Kensellar, who had been admitted the previous afternoon for dislocation of the left shoulder, and of whom I learned the following particulars: He was forty-four years of age. Four years previous, as the result of an accident, he had lost his right leg, which had been amputated at the junction of the upper and middle third of the thigh. At the same time he had lost his right eye, in which there was a staphyloma, and had dislocated the right shoulder; this dislocation had since then remained unreduced. On the day previous to admission he stated that having been drinking he slipped and fell while walking with his crutches, and from the fall had dislocated his left shoulder. He was ordered morphia gr. $\frac{1}{4}$, at seven and a half—this dose to be repeated at ten if he was not asleep. The next morning he took for breakfast a bowl of coffee and some bread and butter. He was quiet and complained of nothing to call the especial attention of the nurse. I first saw the man about 10 A. M., and on examination found, as stated above, loss of right leg, staphyloma of right eye, and an old dislocation of right shoulder. There was, in addition, a recent dislocation of the left shoulder, which occurred as above described, and for which he had sought admission to the hospital. During the examination he sat up in bed, and appeared to be in good condition. He asked to have chloroform administered before the attempt at reduction: this was refused, and placing him on his back, Mr. Nelson, the resident physician, steadied the shoulder while I made a determined effort to reduce the luxation, by placing my heel in the axilla and making forcible traction on the arm. Failing in this, I called to my assistance the nurse of the ward, and together we made a second trial, which, like the first, was unsuccessful. I then directed Dr. Nelson to administer chloroform, hoping to succeed by relaxing the muscles under the anæsthetic. This was given as is usual at the hospital—a loose meshed towel was held a little distance from the mouth, and the chloroform slowly dropped on. After the attempt to reduce, and before the chloroform was given, the pulse was one hundred and regular. The man soon began to show the effect of the anæsthetic; there was some excitement, the breathing became somewnat irregular, and the teeth clenched. The chloroform was stopped, the mouth was opened and at once the respiration became perfectly normal. The pulse at this time showed no irregularity. The chloroform was resumed; there was some spasmodic action of the muscles, so that it was necessary to hold the patient in the recumbent position. This soon passed over, and before the muscles were completely relaxed, the chloroform was removed. Dr. Nelson grasped the shoulder to fix it, and with the assistance of the nurse I made a determined effort, and the bone slipped into place with an audible snap. Just at that moment the patient ceased to breathe—the chloroform having been removed at least half a minute before. The tongue was at once drawn out, water was thrown into his face, and artificial respiration at once commenced. The battery was immediately obtained, and the full force of the induced current from the two cups applied along the insertion of the diaphragm and all over the muscles of the chest. Muscular contraction was readily excited, but without the least effect upon respiration or the heart. Artificial respiration was resumed, and the current applied to the left leg, when the contraction at first easily excited rapidly died out. The head was twice lowered over the edge of the bed, but all to no effect. These attempts were kept up for forty-five minutes, but from the first there was no evidence of the least vitality.

An autopsy was made by Dr. Rives, pathologist of the hospital, in the mortuary. I noticed that the head of the humerus, which had been reduced just as the patient died, was again dislocated,—this I presume occurred during our efforts at resuscitation. The result of the autopsy was as follows: Body well nourished. Post-mortem rigidity marked—the right thigh had been amputated at the junction of upper and middle third. There was staphyloma of the right eye and an old dislocation at right shoulder. There was also a recent dislocation of the left shoulder. Section: The blood was more fluid than normal; the lungs were normal. The heart: Left ventricle firmly contracted, the right relaxed. Both were empty. There was some superficial fat, more especially over the right ventricle. The valves were all healthy, and the muscular walls presented no abnormal appearance. The microscopic examination showed the transverse markings indistinct, but no positive fatty degeneration. Kidneys markedly congested, but no other lesion was observed. The liver weighed 4 lbs. 10 oz., was lighter and softer than normal, and apparently somewhat fatty. The intestines were examined in situ but nothing abnormal discovered. The brain: On the convexity, the arachnoid was slightly cloudy. The arteries at the base were atheromatous in places. Both meningeal and cerebral vessels seemed unusually full of blood. The cerebral substance was everywhere normal.

It seems fair to presume that this man had taken chloroform before, as it is scarcely possible that the thigh could have been amputated without some anæsthetic. The amputation having been performed at Columbus, the strong presumption is that chloroform was used. The chloroform could not have been continued longer than between five and ten minutes, and at no time was the man profoundly under its influence. The whole amount used, as nearly as could be ascertained, was about one and a half drachms. As there has been some comment upon the fact of the autopsy having been made before the arrival of the coroner, and the impression given that, abetted by the hospital authorities, I had hurried through with the autopsy in order to conceal any facts which might be revealed and prove damaging as contraindicating the use of chloroform, it may be proper to state that the examination was begun at my suggestion, and made by the officer of the hospital regularly appointed to make such examinations, was made in the open dead-house of the institution in the presence of several medical men not connected with the hospital, and with the expectation and hope that the coroner would momentarily make his appearance. The post-mortem was not begun until after the hour indicated by the clerk as the time at which the inquest would be held.

Dr. Ludlow. As nothing was said in the report where death commenced, he would like to know how and when death ensued, for in such a case if you galvanize the pneumogastric nerve you at once destroy life, but if the phrenic you do not do so.

Dr. Dandridge. The respirations and the pulse ceased simultaneously, so far as could be observed.

Dr. Murphy. Where does death commence and how does it commence? He thought that, generally speaking, the respiration ceases with the pulse. He had been present on five occasions, and had noticed this blanching of the face, this sinking of the pulse, and the cessation of respiration. He attributed death primarily to paralysis of the heart. He arose in the name of the Academy, in the name of the profession, to protest against the action of the coroner in these cases; for no man when administering chloroform can say that this man or that man, that this woman or that woman, will ever come from under it. We are safe in saying that the percentage of deaths from chloroform is at a minimum, yet notwithstanding all the precautions we may take in regard to the brain, the heart and the lungs, we proceed with some degree of distrust. I most emphatically protest against the coroner having anything to do with these cases without he be requested by the patient's friends to make the post-mortem. Suppose you are called to-night to a case of labor; the patient has convulsions; you administer chloroform and she dies: the coroner is called and makes a post-mortem, and for what? It is an outrage on the profession to have them thus called in. Formerly, when this office was filled by ignorant men, there was a cry to appoint a medical man to the position; here he is, taking the body after a post-mortem has been made, calling in two gentleman to make a post-mortem upon a body whose organs had been cut to pieces, where the brain had been removed from the cranium, cut to pieces and sewed up in the abdomen. It is an outrage upon the hospital, an outrage upon Dr. Dandridge, upon Dr. Rives, and upon the whole profession. The idea of going to work upon this body after it was cut up in the manner it is said to have been! How could the gentlemen satisfy themselves as to the cause of death? After such an examination, he says, "After a careful examination," etc. Are we to have a physician doing the same as these others? Is this all? A howl was raised, and the coroner told me that he made the post-mortem because the reporters made such a fuss. He then quoted from Swan & Critchfield, sec. 9, concerning coroner's duty. "Any body supposed to have come to his death by violence," etc. Was Dr. Dandridge's case supposed to have died from violence? He did not care who was coroner, he wanted to see things done in order and in decency. He continued: There will be a ripping open if the coroner does not proceed differently. A gentleman told me that he had the greatest difficulty in keeping the coroner from interfering in two or three of his cases. The doctor would under no conditions make a post-mortem for a coroner, he would go to jail first. After a post-mortem and the diagnosis of cerebro-spinal meningitis in another case, he at an expense to the county, of one hundred dollars, had the body dug up to make a post-mortem because he said it is illegal. Illegal! It 's legal to insult the profession; it 's legal to have these two poor unfortunate men stand up before a coroner's jury and say to them it 's all right. It is a monstrous piece of fraud. In another instance, a poor unfortunate man having caseous pneumonia was first under my care, then becoming discontented went to Dr. Wood, and a short time afterward again returned to me. He went to New Orleans a little while and then returned to the hospital. He asked me if he would not become better if he moved to Walnut Hills. He removed there, and in short time had an attack of diarrhea and died rather suddenly. His lungs contained large cavities. Some of his relations came from Boston, and suddenly I was summoned to the court-house to find his wife accused of poisoning him.

Dr. Reamy remarked that when he entered, he thought there was a political speech going on. He would not, however, reply to the remarks concerning the competency of the coroner. The Academy had nothing to do with that. The gentleman had sneered at the testimony given orally before the coroner, and at the idea of making a post-mortem after the case had been examined, etc. The organs, so far as he could discover, were normal, and when he said he had made a critical examination of the body, he meant that he had made a microscopical examination of the various organs. The doctor had sneered at the results of such an examination, and if he knew so little about pathology, he ought to enter the dead-room and learn what he did not then know. He concurred in the opinion that too many post-mortems were made; but was it improper to make the post-mortem in the case under consideration? The gentleman has said that he would not make a post-mortem upon a case which has been examined; that it was a slur upon the parties who had made the post-mortem. The speaker did not agree with the doctor upon this point; he had entered upon the work without any preconceived opinions, and no man could have greater friendship for Dr. D. than himself. His relations to the case were simply those of a gentleman called to make the post-mortem. If ordered to make a post-mortem he could refuse. He thought he had no right to state what had been done and who had done it; it was his duty to report what he had found. The gentleman gets sarcastic and quotes Casper; he states that the affair is the talk of the town, etc. He makes a mistake in construing my acts as an attack upon Dr. D. and upon the hospital. He did not think any person was treated disrespectfully or offended; nothing of the kind was intended. The gentleman came near driving me from my office, giving me a moral lecture upon the course I had pursued; but I believe now, as I believed then, it was my duty to report what I found.

Dr. Bartholow thought that the case possessed some interest in a scientific point of view; but could not see that the Academy had anything to do with the coroner. This officer acted upon the information furnished him, in those cases in which death was supposed to have resulted from foul treatment. In such cases it was his duty to make a thorough investigation. A case which had caused him much chagrin had happened in his practice. A man died suddenly of phthisis, and some of his relatives suspecting poisoning ordered a post-mortem. Dr. Maley called in another physician to make the post-mortem, stating that it was to the interest of Dr. B. to have the post-mortem made in this manner, because he might also be suspected. Here it was properly obvious to engage an entirely disinterested person. The doctor regarded the method of administration which had been pursued, and which is generally pursued here, both in hospital and private practice, as an unsafe one. What would be the effect of administering the chloroform in the manner described? The chloroform being two and a half times heavier than the air, would pass through the meshes of the towel so rapidly that a sufficient quantity of air would not become mingled with it, and the lungs would become so filled with the cloroform as to deprive the patient of sense of the want of air, and he would gradually cease all efforts at respiration. The respiration would cease first, and if permitted to pass still further, the heart would also cease, when death would be inevitable. Richardson, of London, had shown that in these cases the galvanic current only increased the embarrassment. The galvanic acupuncture had been reported as being serviceable; this, however, the speaker regarded as doubtful. Dr. Dandridge stated that he began the reduction before anæthesia was completely established. This step the doctor also regarded as a dangerous one, because the shock produced by the efforts at reduction, might cause death. He offered these criticisms, of course, without any ill feeling.

Dr. Muscroft remarked that this method of administering chloroform had not been used in St. Mary's Hospital during the last eleven years.

Dr. Reamy would only add, in reply to Dr. Murphy's remarks, that the gentleman dwelt to considerable length upon the pathology involved, and that he only replied to the assertion, "that the gentleman who made the report to the coroner after a second post-mortem was a fraud." Dr. Rives had stated that the brain was hyperæmic; that he had found it in his examination anæmic; that Dr. Gobrecht and several other physicians were present and could bear him out in his statements. He found considerable blood in the cranium and in the abdomen; and the brain, except a small portion, instead of being sewed up in the abdomen, as had been asserted, was found in the cranium. The blood had the appearance of blood as seen in death from chloroform. The doctor regarded the motives which prompted the action as right, and thought the act a legitimate one in the sight of the law; he had only reported what he found, and it would have been quite different had he gone clandestinely and made the post-mortem.

Dr. Mussey stated that his experience had been somewhat different from that of Dr. Bartholow. That he suspended the administration when the rigidity came on, especially when there was difficulty in respiration, but if necessary continued the administration. He usually gave it by laying the handkerchief over his hand, holding it near the mouth of the patient, and dropping the chloroform slowly upon it. He saw a patient last winter who had previously taken chloroform and had been kept under its influence several hours, struggle violently soon after he began to give the anæsthetic, yet the respiration still easily continued. Suddenly he ceased to breathe, and the doctor resorted to artificial respiration, and the patient soon recovered. In another case, it was necessary to resort to this step three times. He gave a mixture of one part of chloroform and two parts of ether. In another case, after resorting to the chloroform inhalation three different times, he was compelled to withhold the anæsthetic and afterward operate without it. In another case, the patient suddenly died with symptoms of epilepsy after ceasing the administration. In still another case, he had resorted to artificial respiration, and then thrust his finger down the throat to excite contractions of the glottis. He regarded electricity as usually applied as useless. The interrupted current applied to the phrenic nerve is probably best, but in those cases in which apoplectic symptoms were present he had but little confidence in its efficacy. The doctor thought that in those cases where there was severe muscular contraction, it was best to wait awhile; he did not fully agree with Dr. Bartholow's views.

Dr. Muscroft thought that a large amount of the trouble in these cases arose from not properly attending to the respiration. He had several cases in which the symptoms foreboding danger were a spasmodic heaving of the chest, a blanching of the face, etc., and upon calling the attention of the administrator to the breathing, the tongue was grasped and drawn out, and the air entered with a noise.

Sansom calls especial attention to the fact, that when the patient is passing into a comatose condition there is present muscular tremors. However, other gentlemen, as Prof. Bartholow has stated, regard death as due often to the shock and not to the chloroform. We know that sometimes the patient dies from fear, anticipating the operation. He mentioned the case of a boy, about to be operated on for stone, who died suddenly in this manner. There was also another case. A man, who was an habitual drinker, suffered from dislocation of the elbow, and when told it would be necessary to take chloroform in order to reduce the dislocation, he refused, but was subsequently persuaded to permit the administration of the anæsthetic. The breathing was at first full, but suddenly the heart ceased to beat and the patient was, to all intents, dead. When the chloroform is given in such large quantities the nerves of the heart become anæsthetized, and death inevitably ensues. When the point of sensibility becomes entirely obtuse, these dangers become avoided, so far as operating is concerned. But in some cases of injury, as in amputation of both legs for railway injuries, we have both the shock from the injury and from the operation. In the extraction of teeth, you give chloroform enough to bewilder the senses and extract the tooth without pain, but with shock. Some authors, however, recommend operating while the narcosis is only partial. Liston recommends, in giving chloroform, to use a cloth doubled six times and to hold it in such a manner as to permit the air to mingle with the vapor. Some prefer giving the anæsthetic rapidly; but you then may have a local anæsthesia of the glottis, and the tongue becoming also paralyzed falls back and impedes the respiration. You may then have death from poisoning of the blood, from the tongue falling back upon the glottis, or from paralysis of the heart.

Sometimes by jerking the tongue out, the patient will breathe; and in all attempts at resuscitation it is proper to hold the tongue from the mouth.

Dr. Vaughan remarked upon the density of chloroform that it depended considerably upon the temperature of the air; that it was true, as administered by some, it evaporated at the temperature of the body, but at the temperature of 143° it was about four times as heavy as air, and that air at a temperature of 100° would only contain about one-fourth of its volume (the higher the temperature of the air the more chloroform it will contain). He then described his method by which chloroform might be given in varying proportions.

Dr. Muscroft stated that Clover has invented an apparatus so that one can give from three to five per cent. of chloroform; the inventor recommending that the amount first administered be less than three per cent.

YELLOW FEVER.

Dr. Muscroft reported a case of what he considered *yellow fever*, with the following symptoms: The patient, twenty-three years of age, just from Memphis, Tennessee. On the cars, on his way to this city, he was taken with fever and vomiting. When Dr. M. first saw the patient, on the 16th, the skin was hot and burning, as best described by the term *calor mordax ;* severe pain in the head over the orbits; pulse 110; conjunctiva greatly congested ; very thirsty, with threatening nausea all the time, urine large in. quantity, very dark, and had the appearance of containing bile On the 17th, Friday morning, found he had been vomiting dark blood. Friday evening, the pulse had fallen to 78; and this morning, Saturday 28th, the pulse was 64, the urine still large in quantity, and on examination was found to contain albumen. Vomiting has ceased, and the patient is now convalescent.

Dr. Connor thinks Dr. Muscroft correct in his diagnosis, and gives a word of caution : that the patient is now passing through a period of great danger; the period of convalesance is always one of danger to the yellow-fever patient. Dr. C. referred to a case that was convalescing and of sufficient strength to walk, and while walking about the room fell dead. He thinks treatment by medication of but little value; he would simply advise good nursing, with some warm teas and drinks, with absolute rest and quiet. It is a disease that must run its course, and medication is of but little value; for in cases that have died of *yellow fever* post-mortem examinations showed the calomel and opium unchanged in the stomach. Dr. Connor said that three other cases have occurred in this city, and asks for historical data in reference to the appearance of the disease in this city about the year 1815 or 1818.

Dr. Muscroft speaks of two imported cases, both of which died. He also referred to some cases which occurred here about fifteen years ago.

Dr. Tate says yellow fever prevailed in the vicinity of Gallipolis about the year 1808, very marked in type and severe in character. It has a number of times prevailed farther north than this. It has prevailed in New York, Philadelphia, and Rhode Island.

Translations.

Medico-Legal Examination of Sperm-stains, in Cases of alleged Violation.

By M. Z. ROUSSIN. From the *Annales d'Hygiene Publique, Paris.* Translated for the *Cincinnati Lancet*, by ROBERT M. DENIG, M. D., Columbus, Ohio.

When public justice is concerned with the investigation of an alleged attempt at violation, or consummation of the crime, and undertakes to establish the existence of certain facts, the medical expert is among the first appealed to, to guide its action, by the thorough examination of any proofs which may be found on the person or clothing of those concerned in the transaction.

If the accused party, as is usually the case, denies his guilt; if the victim, upon a careful examination, exhibits no manifest lesion upon her person; and there is a want of correspondence in the testimony, the state, in order to get all possible information in the case, has recourse to another method of establishing, at least inferentially, the guilt or innocence of the accused. An attempt at rape may have been made unsuccessfully, or it may even have been accomplished, without leaving any traces of the violence used in effecting it upon the injured person.

In either case, establishing the existence of sperm upon the person or clothing of any one, or both the individuals concerned in the transaction, would be a fact strongly corroborative of the commission of a crime, and might go far to fix the guilt on the accused. This question possesses no small interest, both to the medico-legal expert and public morals, when we recollect with what frequency these attempts are made, and the great difficulty in establishing the perpetration of the crime. Although, perhaps not so difficult as the indentifying *human blood*, the detection of the sperm-cells, under the circumstances which usually accompany it, when presented to the consideration of the medical expert, is by no means an easy task, and requires no less delicate instruments and skillful manipulations than the former.

The very first step in the inquiry should be the instituting minute research, as well where the attack has been made, as upon both the victim and the accused. These researches, made with proper accuracy, lead naturally to the seizure of different articles of clothing, such as shirts, under-petticoats, dress, stockings, pants, drawers, handkerchiefs, etc. All these objects, after a careful inventory of them, should be placed under seal and sent to the proper authorities, to be subsequently placed in the hands of an experienced expert to be specially examined. Before entering into a special detail of the scientific researches we are about to recommend, we think it important to describe the physical aspect and appearance of these stains, and to point out the various localities they are likely to occupy, according to the nature of the clothing seized.

The size of the spots or stains is subject to great variation : sometimes they are only a square centimetre in extent, and even less ; whilst others are very much larger, covering a surface six or eight times that dimension. Of course, in the latter case the number would not be very considerable. The number and size of the spots may vary very considerably from a great variety of circumstances, into the consideration of which it is not necessary now to enter. We may remark, however, that it is extremely rare that only one spot is found on certain articles of clothing; the shirt or drawers, for instance—of either the accused or assailed. When such seems to be the case, a careful inspection will most generally reveal more than two or three, and sometimes even a dozen may be found.

Most frequently the shape of the spots is quite irregular; their edges or border being indented and sinuous, something like the shape of a map or an atlas. This irregularity is always, when it is general and well marked, the result of rumpling the tissue of the garment while the sperm is still fluid and in the act of percolating its substance. Fabrics made of flax and cotton, especially when somewhat worn, are, all things considered, the most readily permeable, and those on which the stain is most easily recognized.

It is not very rare, however, to find spermatic stains preserving a configuration quite circular. This form, which we know is that which a fluid assumes in penetrating normally any fabric, is an indication that dessication has taken place undisturbed.

The color of the spermatic stain is always of a yellowish-gray, when it is deposited on a white tissue, as of cotton or flax. This tint or color is sensibly more marked at the borders, due perhaps to the contrast between the white ground of the cloth and the spermatic stain, and constitutes a characteristic quite constant in regard to these stains. They are always best seen by reflected light, not too intense : when viewed by transmitted light, their color always diminishes and not unfrequently entirely disappears ; but we observe in this case a peculiar phenomenon and one worthy of note.

If we place between the eye and a difiuse light from the clouds a piece of cotton, or more especially of flax, having a spermatic stain on it, we observe, where the latter is situated, a remarkable transparency, which appears to define with the greatest clearness the warp and woof of the fabric, and to render more obvious the little squares made by the intersecting of the filaments of which it is composed. This effect, sufficiently obvious to the naked eye, assumes a remarkable distinctness when seen through a lens magnifying from three to four diameters.

If we attempt to read large printed characters through the maculæ, we perceive that it can be readily accomplished, whilst it is altogether impossible to do so through the part not stained.

We may add that the physical characters, of which we do not wish to exaggerate the importance, present, nevertheless, a degree of certainty which enables us to differentiate between spermatic stains and those occasioned by blennorheal or leucorrheal discharges.

The color, or rather the general aspect of sperm-stains, is not the same as we have described when they are deposited on woolen tissue or colored material. Whilst the ordinary fabrics of flax or cotton, especially when they are somewhat worn, imbibe liquids very readily, and thus allow the penetration of the spermatic fluid into their substance, woolens, either in consequence of the intimate nature of its fibers or the presence of greasy matters peculiar to these tissues, oppose a peculiar resistance to the penetration of fluids in general and to the spermatic fluid in particular. It is owing to these reasons that woolen tissues are never completely infiltrated by the fluid, which dries upon its surface, and gives to the stain which results from it the appearance of a transparent varnish, more or less friable and resembling strongly the trail left on leaves by the common snail.

Spermatic stains are usually stiff and starch-like, but in our opinion this peculiarity, so much insisted on as characteristic, is far from being entitled to as much value as is usually attributed to it. In the first place, this stiffness is but little appreciable, or even entirely absent, if the material is of any thickness or impermeable to fluids, or, on the other hand, has been much handled or rubbed.

But the most important fact to remember is, that almost all the mucous secretions—such as nasal mucus; vaginal mucus, as the pathological fluid present in gonorrheal or blennorrheal discharges; diabetic urine, solution of gum, white of egg, etc.—produce on clothing this starch appearance or feel, in the same degree as sperm.

But none of these characters individually, nor even the uniform agreement of all of them, would enable us to give a positive affirmation as to the nature of the stains or spots submitted to our examination. The anatomical constitution of the spermatic fluid, verified by microscopic examination, would alone enable us to do this. A few words will suffice to place this beyond all doubt. The different fluids, secretions, and tissues of the animal economy, whether considered in a normal or pathological state, are anatomically constituted under a variety of forms, which in most cases suffice to characterize them, and enable us to discriminate one from the other.

It is thus that the blood of mammifera presents corpuscles, which are circular, biconcave, red, etc., called the red corpuscles of the blood—the different mucous secretions, epithelial scales, varying in form and size according to their local origin; the muscular tissue its striated febrillæ of peculiar form and diameter; the nerves tissue its cells, tubes, and fibers, having a characteristic aspect, etc. These different forms, however well they may have been designated by science, and however constant they may be in their configuration, offer nothing comparable, in the way of certainty and uniformity, to the constant normal element of the sperm of man, which we designate under the different names, *spermatoza*, *spermatoids*, *zoosperms*, *spermatic animalcules*, *spermatic filaments*, etc.

Examined with a microscope under a proper amplification, the recent sperm of an adult enables us to perceive a very large number of small animalcules, which move about with the most extreme rapidity. Their form resembles very much that of a young tadpole, or perhaps more accurately, that of a grape-seed a little flattened, of which the swollen part is prolonged into a very long tail, regularly conical and gradually narrowing to an invisible point.

The following measurements give accurately the dimensions of the different parts of these animalcules.

Length of head, 1-200 mill. = 1-5100 inch.

Length of head (in its inflated part), 1-300 = 1-3415 inch.

Thickness of head (in its inflated part), 1-500 = 1-12950 inch.

Length of tail, 1-20 = 1-500 inch.

Whole length of zoosperm, 1-18 = 1-459 inch.

These zoospores continue to move by the rapid undulations of the tail for some minutes after emission of the sperm; but presently these movements cease, and the little bodies remain fixed in the last position they occupied at the moment of death—the tail sometimes elongated, sometimes irregularly curled up, but not on this account less distinct.

As long as the sperm remains fluid, the detection of these zoospores is easily accomplished. It is sufficient to place a small quantity of the fluid on a glass slide, and having carefully covered it with a piece of thin glass, and use an amplification of brome, 300 to 400 diameters, and proper light, and they are at once seen.

But in a medico-legal point of view, the examination of liquid sperm, as in examination of blood, constitutes the exception. As for ourselves, notwithstanding the great number of examinations we have made, it has never occurred to us to have a case submitted to us which was not in a perfectly dried condition.

What becomes of the zoospores when the sperm is completely dried in contact with the air? Is it possible to again find and recognize these fantastic but eminently characteristic little bodies? The following experiment leaves no doubt on this subject: Let us collect a small quantity of liquid sperm on glass slide, or in a watch-glass, and subject it to a gentle heat, say 30° or 40°. We will soon see the matter concrete and form a slightly yellowish translucent varnish, which may easily be detached and inclosed in a small glass-tube and the same closed hermetically. In this state the sperm undergoes no putrid alteration, and may be preserved an indefinite period of time. Now, whatever has been the length of time it has been kept, if we place a small quantity of this dried varnish-looking matter upon slide and gently moisten it with a drop of water, allow a few minutes to disintegrate, and then place it under a microscope as above directed, we will be surprised to see the infinite number of little zoospores, quite intact, which will be present, quite as distinct as those in a recent state.

If this operation be performed with sufficient skill and care, it is seldom we will observe among them any considerable number of broken ones; that is, heads without tails, and tails without heads.

We have in our possession a specimen of dried sperm, collected in 1849, preserved in a small glass-tube, the least portion of which, treated in the manner mentioned, will reveal hundreds of these little bodies in a most perfect state. So far there is no difficulty; dessication alone causes no change in their form. If, however, the spermatic fluid be deposited, not upon an even and smooth surface which does not admit capillary absorption, but, on the other hand, is dried on some kind of flexible tissue—say flax or cotton—as is generally the case, it is by no means such an easy matter to find again and recognize the characteristic entire forms of the spermatic animalcules. We have made in this matter a great many direct experiments, which prove very conclusively that sperm, allowed to dry spontaneously upon either cotton or flax tissue, does not give up readily to the water used in moistening it the spermatic filaments it is supposed theoretically to contain.

If the water be placed in contact with the spot, and the operation be carefully and skillfully performed, and especially if the observation be very much prolonged, we may find some rare spermatozoa, accompanied by a quantity of debris or fragments; but, whilst in operating on a specimen of sperm dried on glass or porcelain but a few minutes will suffice to exhibit in the field an innumerable number of zoospores, it is barely possible that after half an hour's search on the cotton we will observe more than a few fragments.

The preceding facts suffice to explain the difficulty a micographist experiences in making his researches, and in finding in the field of his instrument any spermatozoa; when, at the same time, the portion of cloth or tissue submitted to his examination may contain them by thousands.

During many years we have put in practice all the known methods, and especially the one recommended by Robin, which often produces good results; and many times it has happened to us, after the most careful research, not to arrive at any definite conclusion, when there was no reason to doubt their presence. The frequency of these failures became such, that we considered it our duty to find out the cause, and remedy it, if possible. We are quite confident we have succeeded in our efforts to do so. The causes of the difficulty are three: 1. When sperm is dried on a smooth surface, it forms a scaly and pilable varnish, which imprisons and solidifies the zoospores. If this surface is inextensible, as glass, wood, etc., the zoospores preserve indefinitely their form, and by simple humectation they are released from their imprisonment and rendered visible, unchanged. If, on the contrary, the sperm is dried on a porous, flexible, and extensible body, as the ordinary fabrics of wearing apparel, we can easily perceive how the least stretching or rubbing of the tissue would break up and divide this dried substance, and consequently the little bodies contained in it. Prolonged moistening of the dried sperm under these circumstances would reveal nothing but a confused mass of broken fragments, having nothing characteristic or of specific value. Now, most generally the articles of clothing seized with a view to these examinations, independently of the crumpling and rubbing which they would have to undergo during the struggle, would be subjected to a renewed disturbance in the process of seizing, folding, and sealing preparatory to sending them to the proper office for inspection. When these articles arrive in the hands of the expert, the characteristic anatomical feature, and the one which alone can be relied on to establish the presence of sperm, is in a great measure, if not wholly destroyed, and microscopic search fruitless. Looking upon this as a matter of no small importance, we have taken occasion to recommend to the *procurer* of the department of the Seine a method of procedure, the adoption of which has already resulted in the most satisfactory manner. This eminent officer prescribes, by circular, that when, under suspicious circumstance, it is necessary to transport these stains or spots to a higher officer, they should be carefully cut out without crumpling or stretching the cloth, and placed in a suitable sized box between pieces of pasteboard, and sent under proper seal. 2. The second cause of the difficulty in finding these little bodies is their extreme transparency. We have resorted to many means in our endeavors to overcome this; none of these have been of more practical value than the addition of a small quantity of tinct. of iodine, held in solution in the water by the presence of a little iod. pot. This re-agent alters neither the form nor the volume of the zoospores; but on its contact they immediately assume a remarkable relief and show themselves in the field of the microscope with the greatest exactness of outline.

We recommend the employment of this solution very strongly to those who may have occasion to make these researches. We use the solution in the following proportions:

Iodine, grs. i; pot. iodide, grs. iv; aquæ distil., grs. c. (100.) M.

The third and last cause which hinders the search for these animalcules, when placed in cotton or flax fabrics, etc., does not appear to have been suspected till now, though it seems to us the most important of all of them. A few words will enable us to comprehend it. If we take a fragment of linen or cotton of the size of a square centimetre, impregnated with sperm, and allow it to mascerate about an hour in a little glass tube, terminating at one end in a closed conical point, in a small quantity of distilled water, it will, although frequently shaken and agitated, enable us to perceive with the microscope *no* spermatic animalcules. The little flocculent matter which settles in conical extremity of the tube, will very rarely be found to contain them either.

If we withdraw from the liquid the fragment of cloth and examine also microscopically the little matter we can collect by scraping both sides of it, we often discover with difficulty a few shapeless remains—rarely indeed any perfect spermatozoa.

What, then, has become of this prodigious quantity of zoospores inclosed in the mascerated fragment of tissue. Since the liquid used in the masceration contains such a limited portion of them, they must still remain in the tissue itself. Experience confirms this suspicion in the most unequivocal manner.

If we now detach from the fragment of tissue still moist, which has served for the last experiment, a single thread, and place it upon an object-glass with a drop or two of water, and then with a couple of mounted needles, gently separate the ultimate fibers of which it is composed and examine again, we will find, not perhaps without some surprise, quite a number of spermatozoa, some broken and some entire. Each vegetable fiber appears enveloped in a viscous matter, formed by the albuminous debris of the sperm, which, when slightly rubbed, enables us to detach a portion of it.

These results should not surprise us, when we call to mind the length and tenacity of these little animalcules, which permit them, whilst the sperm is still fluid, to interlace themselves among the ultimate fibrillæ which compose the threads of the tissue, and to become dried in the tortuous network of all these filaments. The moistening of the stain by water swells up the sperm, softening the spermatozoa, but leaving them still where they were drawn by capillary attraction. The exact knowledge of the physical, chemical, and anatomical characters of sperm, and of the principal difficulties we meet in demonstrating its presence, enable us to prescribe a method for its detection, which, we think, if followed, will rarely fail to be crowned with success.

With a very fine and appropriate pair of scissors we cut, either through the center, or around the border of the spot—say half a square centimetre—taking care to avoid stretching it, or using any unnecessary friction in handling it. We place on the bottom of a watch-glass two drops of distilled water, and seizing with a pair of forceps the suspected fragment, place it softly on the surface of the water, which little by little penetrates it until it is completely moistened. Experience has taught us that the masceration ought to be continued about two hours, during which we simply cover the watch-glass to prevent evaporation and prevent any foreign substance from gaining access to it. At the end of an hour we turn it over and completely immerse it in the water. The moistening having been accomplished, with the aid of a good lens and a couple of mounted needles we carefully tear apart and separate the chain and filling which compose the fabric. We then place on an object-glass a little of the fluid from this preparation, or simply seize with a pair of fine forceps the little moist mass, and gently press the surface of the slide with it, covering quickly with an object-cover, avoiding as much as possible inclosing any air-bubbles, and at once proceed to examine with a proper power.

Our microscopic observations should be deliberate and persistent; every part being successively brought in the field with methodic exactness and extreme slowness of movement. Each visible corpuscle should be carefully scrutinized, by alternately placing it in the center and edge of the field, changing the focus and direction of the light until we are entirely satisfied as to its nature.

If we discover a certain number of cylindrical or pyriform corpuscles of bodies, it is almost certain the stain has been occasioned by sperm, and that a continued search will bring in view some entire zoospores.

It happens occasionally that the examination of the fluid, however minute, fails to conduct to any satisfactory results ; it is necessary in that case to recur to examination of the isolated filaments of the fabric. One of its threads should be placed on the slide, and then, as before mentioned, with the aid of a lens and needles, its ultimate fibers should be spread out on the glass, slightly moistened with a drop or two of water, re-covered with a thin glass, and again examined.

By pursuing this course—carefully and patiently carrying it out—we will seldom fail to be rewarded by the discovery of a number of entire sperm-cells, if any be present. If we fail on one thread, we should proceed with another, until we have examined successively all of them. It is under these circumstances especially that we find the iodine solution mentioned so beneficial in aiding our examination. All the spots or stains found on the surface of the clothing or objects seized, are by no means caused by sperm, even in cases where violation has been well established. Upon the shirts, pants, petticoats, etc., there exists usually other stains, which it is necessary for the expert to notice and describe in his report, since they are often, as we have already mentioned, of significant importance in the process of the judicial investigation. We may mention the following as of the most frequent occurrence:

1. Yellowish, large, diffuse spots—stains from urine.

2. Greenish yellow of uniform odor, form, and locality, sufficiently indicating their excrementitious origin.

3. Dark red, thick, rough, composed of blood and vaginal secretions, vaginal epithelia, and frequently containing the zoospores of sperm.

4. Whitish yellow, somewhat opaque, thick, in which we find only epithelial cells and numerous white globules, some crenated and containing numerous punctiform nuclioli. These spots are evidently the result of abnormal mucous secretion and purulent discharges.

5.. Spots of a brown-marroon color, much scattered, very numerous, very small, and occurring particularly on the sleeves and upper portion of the chemise of children: the spots commonly called *taches de puces*, flea-bites, are due no doubt to the presence of this insect. No detail ought to be neglected in the description of these different spots; for many times, as we have already said, these facts, apparently trivial in themselves, assume in the process of the trial a paramount importance. The following two cases, derived from my own observation, will serve to give some idea of the significance of these details.

In August, 1864, we were ordered by the judge of Senlis to determine the nature of certain stains found on different articles of wearing apparel, etc., in a case of violation and murder. The clothing of the victim was literally saturated with blood. In some of the stains on the chemise we established the presence of sperm. On the clothing of Mercier, the accused, a young man, twenty-two years of age, we detected without difficulty traces of blood, which had been partially removed by washing.

His handkerchief, which alone had not been washed, had numerous stains and streaks of blood, and especially one quite large one, nearly circular in shape, in the center of which quite a quantity of spermatic fluid was found. I had stated in my report that this singular disposition of matters justified the following hypothesis: The accused, having committed his crime, found the *verge* covered with blood, and had made use of his handkerchief to wipe it off. In doing so, the glans penis had made a stain almost circular, the pressure upon it having at the same time removed from the end of the urethra the remains of the spermatic fluid to the handkerchief.

The developments at the trial and the subsequent confession of the accused established the following facts: The victim was a little girl, seven years of age; her assailant had enticed her into a neighboring field, and having made fruitless attempts to violate her person, had taken out his pocket-knife and used it, enlarging the vaginal orifice. In his precipitation and the struggle which ensued, he made the incision unduly disproportionate to his wishes, allowing the intestines to protrude. Baffled in his attempts now to gratify his lust, he resorted to his knife again, this time making an opening of smaller dimensions in her abdomen, by means of which his violation (if this new horror may be so termed) was completed. After having wiped off his *verge* with his handkerchief, he fled, abandoning his victim, who survived but a few hours.

CASE II.—In November, 1865, M., judge of instruction in the Seine department, committed to my charge the examination of the chemise of a young girl supposed to be the victim of violation. The accused, P——, denied the crime with which he was charged. Spots on the little girl's chemise were numerous and of considerable size, and the examination left no doubts of their spermatic origin. The most of these spots presented a peculiarity, to which I referred in my report, without attaching to it any significant importance: the spots had, as it were, imprisoned and solidified quite a considerable number of *granules of ordinary corn starch, mixed with a smaller number of granules of potato starch.* Now, all these granules were absolutely intact, and had not undergone the slightest change or transformation; further, they were found on the chemise only where stained with the sperm.

It occurred to me that either the victim or the accused had belonged to some business in which these articles are used or sold, as baker, confectionery, or grocer. After making my report, I had the curiosity to inquire into the matter, and was informed by the judge that the accused was a grocer; and that in the room where the violence was supposed to have been committed, there were said to be only a small bed and some sacks of coffee and sugar.

Struck with the singular fact contained in my report, he had gone immediately to this room, and discovered precisely at the foot of the bed, and touching it, a single sack with the mouth wide open, containing some forty pounds of farina or flour. This farina, when examined microscopically, was found to be a mixture of corn starch and potato starch. Doubtless, in the contest, some particles from the sack had attached themselves to the chemise soiled by the sperm, fixing the crime upon the accused.

In concluding the above translation of *Mon. le docteur Roussin's* valuable article on the examination for sperm-cells in medico-legal cases, it may not be out of place to adjoin a few words on the chemical importance of their presence in urine, and in doing so we can not do better than give the following extract from "Dr. Richardson's Hand-book of Medical Microscopy:" "The clinical importance of the appearance of spermotozoa in the urine has been greatly overestimated, since they are often present in the urine of perfectly healthy males, and only indicate the occurrence of a seminal emission, whether by coitus or otherwise, some of the spermatic fluid always adhering to the walls of the urethra and being washed out in the next succeeding or subsequent efforts at micturation; so that only when these bodies are constantly found in the renal secretion does their presence become a symptom worthy of attention. It is probable that the disease called spermatorrhea, fancied attacks of which provide such a fruitful harvest for advertising quacks and charlatans, is extremely rare, if, indeed, it exists at all as an independent affection; for, as remarked by Dr. Beale, 'the secretion of the testicle, like that of other glands, must at times escape; and when it is formed in undue quantity, and discharged too frequently, it is usually but one of a train of symptoms dependent upon changes in the general health.' The detection of spermatozoa in the urine may sometimes give a valuable hint as to the origin of obscure cases of dyspepsia and general debility, in excessive masturbation, as, for instance, when the morning urine of several days in succession is found to be loaded with this deposit; and, on the other hand, a microscopist may occasionally render good service to one class of hypochondriacs, by proving to them that their water passed during the day, at least, is free from seminal fluid.

"The detection of spermatozoa in the urine of females can lead, of course, to only one obvious conclusion, although the greatest caution must be exercised in *expressing* any opinion, always bearing in mind the possibility of error from accidental admixture of the masculine secretion *outside* of the body. A distinguished physician of this city was perfectly astounded on being informed that a specimen of urine (from a young girl supposed to be laboring under a totally different *affection*), which he had sent to me for examination, contained numerous spermatozoa, and could only be convinced of the fact (so incredible did it seem, in view of the patient's social position) by an ocular demonstration."

In nearly all of these cases of so-called spermatorrhea, more appropriately termed *spermatophobia*, if you can succeed in securing your patient's confidence, and disabuse his mind of the ridiculous and exaggerated importance of an occasional seminal discharge, you will have no difficulty in curing him. Unfortunately your opinion is most generaly forestalled by that derived from those infamous quack publications, with which the press in the East teems, and which so alarm and terrify the excited imagination of the *ignorant sufferer.* A plain and simple statement of the physical requirements of the animal economy will sometimes suffice, and that is the best course to pursue. No *honorable physician* will stoop to profit by the fancied terrors of his confiding patient. It has been our lot to be consulted by as many of this class of patients as falls to the lot of most practitioners in general practice, and we can say with truthfulness, that in not a tithe of the cases have we found it necessary to appeal to the resources of our art. I may further add that neither the patients nor myself have ever had occasion to regret giving or following the advice. In those rare and exceptional cases which seem to require treatment, we have found the bit. ferri et strychnine a valuable remedy. Dr. Richardson recommends bromide of potash, in half-drachm doses, at bed-time. I have tried it and find it a valuable remedy.

Correspondence.

Hammond on Emotional Insanity and Irresistible Impulse—"Circumstances alter Cases."

Wm. A Hammond in "*Insanity in its Relations to Crime*" (page 71): "And as regards 'irresistible impulse,' it is doubtful if it ever exists, even with the insane."

Wm. A. Hammond, in *Psychological Journal*, July, 1870, "*A Medico-Legal Study of the Case of Daniel McFarland:*" "The man who acts under the influence of calamity, obeys, as a machine, a force he can not contend with. How far the accused in the present case was acting from passion, and how far he was under the influence of a calamity, *the force of which he could not resist, will be apparent from a consideration of the facts developed during the trial, and those which I have ascertained by my personal examination.*" Page 474. . . . "From this full and decided evidence, there can be no doubt in regard to the mental condition of Daniel McFarland during a long period previous to the homicide; and that, for about two weeks prior thereto, his state was such as to render him entirely irresponsible for his acts." Page 476.

"The result of the trial is well known. After an absence from the court-room of scarcely two hours, the jury returned a verdict of not guilty. That this verdict was based upon the views expressed by the medical experts for the defense, of whom the writer was one, I have positive assurance." Page 480.

Thus, after discussing passion, emotion, etc., in this case, the conclusion is that McFarland suffered from emotional insanity, and "that the act itself was done during an attack of temporary insanity" (page 478); that he had "cerebral disease."

Let Hammond criticise this himself: "And, even if actual cerebral disease be the cause of the irresistible impulse, it does not materially detract from the right of society to protect itself against injury from those in whom it exists. A dog afflicted with hydrophobia, going about snapping at those who come in its way, is destroyed in order that it may not bite us, and may not poison other dogs, who in their turn might, bite us. *The dog is suffering from a disease of its brain, which gives it an irresistible impulse to bite. We kill it without the slightest hesitation.* . . . The only forms of insanity which, in my opinion, should absolve from responsibility and, therefore, from any other punishment except sequestration, are such a degree of idiocy, dementia, or mania, as prevents the individual from understanding the consequences of his act, and the existence of a delusion in regard to a matter of fact which, if true, would justify his act. . . But the individual who has sufficient intelligence to know that pointing a loaded pistol at a human being, cocking it, and pulling the trigger, are acts which will cause the death of the person against whom they are directed, should be subjected to the same punishment for a homicide as would be awarded for a like offense committed by a sane person. . . Emotional insanity and volitional insanity, or irresistible impulse, should generally be allowed as much extenuating force as 'heat of passion.'" Pages 73 and 74 of "*Insanity in its Relations to Crime.*"

We submit the above without comment.

D. A. MORSE, M. D.

New Procedure for Opening the Larynx with the Actual Cautery.—M. de Saint Germain, in his clinical conferences at the Hòpital des Enfants Malades in Paris, advocates this plan: Struck with the many difficulties attending the operation of tracheotomy, M. de Saint Germain sought a region preferable to the trachea, and an instrument other than the knife. He sought to open the larynx by puncturing the crico-thyroid membrane, a point which is easily found, and this he effected with the actual cautery. Experiments on dead bodies and on dogs, showed the practicability of the operation. Care must be taken not to burn the posterior wall, nor to injure the vocal cords, which are near.

M. de Saint Germain has devised a graduated cautery of platinum, which is light and can be held between the finger and thumb, like a pen; it can therefore be directed with great precision. The point must be quite blunt, as it enters very readily if applied perpendicularly.

The galvanic cautery and even the actual cautery have been advocated long ago, and Signor Palasciano, of Naples, is said to have for a long time used a strong bistoury heated to whiteness.

The Actual Cautery for Opening Abscesses in Children.—M. de Saint Germain resorts to this plan, which avoids loss of blood, and he believes acting as an excitant on the walls of the abscesses, advantageously modifies them.

Selections.

Sore Nipples and Mammary Abscess. By FORDYCE BARKER, M. D., Clinical Professor of Midwifery and Diseases of Women in Bellevue Hospital Medical College.—GENTLEMEN: All of you may obtain a great reputation by performing some important surgical operation; but the unfortunate fact with regard to such reputations is, that they are not easily secured, because the opportunities only rarely present themselves for such operations; and, indeed, you may pass a lifetime in an active practice without once being called upon to perform an ordinary amputation of the thigh or arm.

Your reputation, however, may be very much jeopardized, if not ruined, if you are not able to treat successfully a case of sore nipples or mammary abscess, and these are the cases you will see perhaps every week in your life. In these cases the responsibility will always fall upon the doctor, and unless he is familiar with their management the weight may prove more than he can well bear.

In text-books in general there is a sad deficiency with regard to description of the different forms of these troubles, the proper management, and the exact and appropriate treatment for each definite form.

Various articles, with which every practitioner is more or less familiar, are recommended for their cure, without any definite rules being laid down, where one or another will be applicable. These remarks apply with equal force to both sore nipples and mammary abscess. The forms of sore nipples are these: First, inflammation. This generally occurs in those cases where the nipple is naturally contracted, or in those cases, which are not at all infrequent, where the nipple is almost completely absent.

The child when placed at the breast has great difficulty in getting hold of the nipple, especially when the breast is distended, which renders the nipple still more retracted; it pulls away at it, and as a result of the irritation to the breast an inflammation of the nipple takes place. This inflammation of the nipple may, by propagation, pass into the lacteal ducts, and we may have mammary abscess as a consequence of that.

Second, fissure or erosion of the nipple. These fissures of the nipple are of two forms. One comes from inflammation of the nipple, but there is another form which exists just at the base of the nipple, and gives the most intense pain and suffering, the patient, perhaps, bursting out into a profuse perspiration as the child is placed at the breast.

The next form of sore nipple is the ulceration which I have referred to in connection with the case now before you. The surface of the nipple is red, and denuded of its cuticle; the nipple is very much retracted, and in this case there is a fissure at the top. The pain is very intense, and it may be that the woman experiences as much suffering from this as from anything else during the entire puerperal period. The process does not generally confine itself to the nipple alone, but the areolar tissue around the nipple becomes inflamed, and as the inflammation becomes more intense, perhaps one-half or two-thirds of the nipple becomes entirely destroyed in the process. These three forms are distinctly and easily recognized; and now a few words with regard to the treatment of these different forms.

In the first place, for drawing the nipple out. There is a great difference among authors as regards the propriety of applying the child to the breast immediately after the confinement has been completed, and also as to the proper time when it should be done. Some writers recommend that it should be done as soon as possible after delivery. The reason given for this early application of the child to the breast is, that the child by nursing stimulates the breasts, which excites reflex action in the uterus, thereby producing uterine contraction, which renders the woman less liable to post-partum hemorrhage.

With reference to that point, I can say I do not consider it to be sound practice. I adopted it for some years, but have given it up entirely. You can procure uterine contraction, which will place the woman out of all danger from post-partum hemorrhage, by means which are far less exhausting for the patient than the resort to the troublesome efforts of the child at nursing. I now advise to get the woman completely restored after the fatigue of confinement before applying the child to the nipple.

The first stage after parturition is that of exhaustion. The whole effort of the system has been used to accomplish this result, and so complete is the exhaustion, that it is very commonly manifested by nervous chills. If the woman is permitted to get a few hours of sleep, her exhausted nerve-power will be restored, and *then* is the time to direct that the child should be placed to the breast.

The main reason for this is, the breast is not now distended, and the nipple is easier drawn out. The traction excites the more rapid secretion from the breast, and the first secretions from the breast are of great benefit to the child as a laxative, being its first proper food. It is then that the nipple can be more readily grasped by the child, and properly formed. If, however, you wait until the secretion of milk has taken place, and the breast has become distended, before applying the child, the distention itself causes obstruction to a free flow through the ducts, and the nipple and breast may become a very great source of irritation.

There are some cases in which the nipple congenitally is so short that the child can not get hold, and it must be drawn out by some mechanical appliance. The most common method resorted to for accomplishing this is the old-fashioned application of a bottle, which has been filled with hot water and emptied, and the use of the breast-pump.

A few words with regard to breast-pumps. Most of them are constructed upon principles utterly devoid of common sense. Most of them have so small an opening in the part applied to the breast that the nipple is constricted, and the milk can not flow at all after the first two or three exhaustions of the instrument.

The essential requisite for an efficient breast-pump is a large bell-shaped extremity, so that the nipple is not at all constricted by the narrow diameter which is applied over it.

The pump which meets the indications most satisfactorily, and which has come to my notice, is what is called Mattson's breast-pump, and it is a most excellent instrument.

With regard to treatment of the sore nipples, the following are the rules which chiefly govern me in the management of these cases: If the nipple is inflamed, apply a poultice until the inflammation is subdued, and then apply a solution of nitrate of lead in glycerine, ten grains to the ounce. This is also the most complete and perfect prophylactic against the occurrence of sore nipple that I know of. This solution should be applied immediately after nursing, having first washed the nipple perfectly clean.

The application must also be washed off every time before the child nurses. It is almost a specific, when properly used, against excoriations and ulcerations. If the tendency is quite strong to sore nipples, the solution may be used of the strength of 15 grs. to the ounce, or even ℈i; but as a rule the 10 gr. solution is sufficient. Next, where the cuticle is denuded, and we have a raw surface, or it becomes so irritated that there is a tendency to an abrasion, the indication is to form an artificial cuticle, which will entirely protect the parts, and yet permit the milk to pass through it.

For this purpose collodion has been extensively used. The objection to the collodion is this, that it contracts as it dries, and thus itself becomes a source of superficial irritation and discomfort, and does not readily permit the flow of the milk. I have used for this purpose, and with the most satisfactory results, the compound tinct. of benzoin. Wipe the nipple dry after the child has nursed, and with a camel's-hair brush apply four or five coats of this tincture.

The first application may produce some burning, but when once applied this will be entirely overlooked, and the woman will desire its reapplication. This forms a most excellent artificial cuticle, and at the same time permits the flow of milk without obstruction. Cicatrization will take place under this coating, and the patient will thank you for the benefit received. When the fissure is at the base of the nipple, very small it may be, but accompanied by the most severe and agonizing pain, the most satisfactory method of management is to touch the fissure with a fine point of nitrate of silver, and apply over this the comp. tinct. of benzoin as before.

When the inflammation and ulceration have gone on to such an extent as to destroy the surface of the nipple, and there is danger of the inflammation extending back to the mammary gland, do not allow your patient to torture herself by allowing the child to nurse. Remove the child entirely, and empty the breasts by the breast-pump or by rubbing.

I then use as an application in these cases the following:

℞. Rose ointment	℥i.
Carb. magnesia	℈i.
Calomel, grs.	xxx.
M.	

These ingredients should be rubbed together very carefully, and it should be freshly prepared, perhaps every twenty-four or thirty-six hours. If the child is permitted to nurse at all, it should be done entirely through an artificial shield, and the best shield is one made of the cow's teat. The objection to the India-rubber shield is, that there is an offensive odor emitted from them, and they are very apt to make the child's mouth sore.

If, however, it becomes necessary to use the shields which are in the market, in selecting them get a broad base, what is called the L-shaped glass, in the same manner as in the selection of the breast-pump. The ordinary nipple-shields seen in the stores are simply abominable.

The next subject which is immediately connected with the one just under consideration, is a very troublesome complaint, viz: mammary abscess. This woman who is now before you has been confined about one mouth, yet it is only three days ago that she began to complain of her breast, and since that time suppuration has taken place.

This is an important point, and one which is often overlooked in the books. It will be seen that the whole surface of the gland about the nipple is inflamed, the woman had a chill, has a fever, etc., etc. This is probably one of those cases which is the effect of the peculiar poison which develops puerperal fever in some cases, puerperal peritonitis in others, and mammary abscess in others. There are three different forms of mammary abscess. First, inflammation of the cellular tissue surrounding the nipple and external to the breast; second, inflammation of the substance of the gland itself; third, inflammation of the areolar tissue between the gland and the thorax. The first form may result from irritation, and is nothing more than a pure simple phlegmon, requiring the same treatment. It usually terminates rapidly, is not attended with the constitutional shock which accompanies glandular inflammation, and is to be treated the same as phlegmonous inflammation elsewhere. As soon as fluctuation is detected, the question may arise whether the escape of the pus should be permitted to take place spontaneously, or whether the breast should be opened by the surgeon. The amount of constitutional disturbance is to decide that, and if it is decided to open it, the incision should not be made within the areola, because the retraction which is incident to cicatrization will spoil the nipple for future use. The sooner this discharge takes place, the sooner the healing process will be completed, and the breast restored to a healthy condition.

In case the gland itself becomes inflamed, it is attended with more constitutional disturbance. There is headache, chills, fever, full pulse, high temperature, etc., and yet even greater constitutional disturbance if there is a tendency to the formation of multiple abscesses. If these cases are seen at a very early period of their formation, when there is great tenderness, high temperature, fever, etc., pulse 108, perhaps 120, it may be well to try to abort the inflammation. For this purpose I give the woman ten grains of Dover's powder, with an alkali; paint over the surface of the gland with tr. iodine, and cover it with a warm poultice or cotton padding covered with oil silk. Empty the breast with a pump, and in most cases you will arrest the whole thing at once. The trouble is, that the patient does not see the physician until this period has passed, and then suppuration must be favored by poultices. Internally the patient must be ordered as full doses of quinine as she will tolerate.

As soon as fluctuation is detected, open the breast at the lowest point, because otherwise pus will burrow between the tissues of the gland, become a source of irritation, and produce another inflammation.

The third form is called the sub-glandular, and it is attended with still greater constitutional disturbance. It has none of the external redness present in the other forms, because it is situated between the gland and the thorax.

The gland sometimes becomes very prominent. The inflammation is attended with intense, severe pain, rigors, chills, and yet upon the external surface there may be no special intimation of its existence. The most significant symptoms are that the patient complains of difficulty of breathing on account of pain produced, and, when present, the prominence of the gland. These cases are generally exceedingly tedious, and sometimes dangerous, because the inflammation is so deep-seated that the pus between the gland and the thorax burrows about, forming sinuses and extensive fistulous tracts, which may be exceedingly troublesome and exhausting from the profuse discharge and constitutional irritation which is produced.

My hour has already passed beyond its limits, and further remarks upon this subject must be postponed until some future date.—*Medical Record, N. Y.*

Origin of Miasms.—Speaking of the introduction of germs, Prof. G. M. Humphrey says:—Associated with this subject is that of the introduction of noxious agencies from without, and the various questions bearing upon it, such as the decomposition of fluids, the introduction, dissemination, and propagation of germs, and, I may add, their spontaneous generation. The importance of a fuller investigation of those subjects to the adopting of effectual means to prevent the spread of disease is sufficiently obvious. Some points appear to be clear.

First, it is pretty clear that air is the great, if not the only vehicle of these insidious agencies, whatever they are; and that the exclusion of air or the purification of air from them prevents the occurrence of their effects. To this exclusion of air in the one case, and its admission in the other, must be attributed the differences in the changes which follow a simple and a compound fracture, as also of a subcutaneous and a more free external incision. There can be little doubt that if air could be entirely excluded, the various serous and synovial cavities might be opened with comparative immunity, and operations could be performed, from the probable or certain danger of which we now wisely shrink. It is upon the purification of air from these agents, or germs as they are called, that the antiseptic treatment, so ably propounded by Professor Lister at a former meeting of this association, rests its claim. Certainly, whether they are germs or not in the ordinary sense of the word, they are so inasmuch as they are the starters or initiators of a new series of changes in the fluids or solids of the body.

Secondly, it is clear that these influences operate with greatest rapidity and facility where vitality is lowered. In other words, the nutritive and other processes are most easily impressed and diverted in a new direction in persons and parts where they are least vigorously conducted. Where the tendency to a right direction is staggered or weakened, the tendency to a wrong direction is most easily given. A fainting or a depressed body is well known to be a ready victim to poisonous and malarious agencies.

Closer observation of animal and vegetable life tells, more and more, of the prevalence of parasitic growth and of those lowered conditions which induce its excess. If a garden is blighted, we know that it is so because the vigor of the trees is lowered by imperfect ventilation, frost, or some depressing cause. We recognize in it a mode of killing off some of the imperfect and overcrowded plants; and to apply these physiological principles to the case of man, we see that the maintenance of the vigor of the population by judicious sanitary measures is the only means of preventing an epidemic, and, at the same time, of preventing those evils which epidemics have the effect of correcting. We learn that, if it were in our power to stop epidemics by any mode, as by the institution of rigid quarantine, without attending to this point, we might, by so doing, effect more harm than good; forasmuch as we should incur the liability of engendering other, more insidious, and perhaps more destructive maladies than those we attempt to ward off. Physiologically, the security of a country from invasion by epidemic and other maladies depends not on the rigor of its quarantine laws, but upon the efficiency of its sanitary enactments; just as, in a military point of view, security from foreign invasion and intestine commotion depends less upon bristling fortresses and strong ramparts than upon those laws which promote the energy and independence, and give scope to the physical, mental, and moral development of the people.

Carbonic Acid in the Urine in Fever.—Of late the amount of carbonic acid excreted under normal conditions by patients with fever has been regarded as an important element in the metamorphosis of tissue, and has been determined both by direct and indirect methods. The results obtained by investigators provided with better means of research which give an increase in the amount of carbonic acid exhaled from a patient with fever, differ from those of the older observers. A similar result is not given by observations upon animals in a febrile state (*i. e.*, when the temperature is artificially elevated), in whom there is either no increase in the production of the gas in question, or if there is any increase it is but slight and irregular. The importance of the question renders it desirable to support the results already obtained, and to strengthen them by a new series of observations upon febrile patients, conducted by new methods.

Apparently the difference in the results in the experiments on men and on animals can be accounted for by individual characteristics, for it is not possible for the experimenter to reproduce the febrile state so accurately in animals that he can apply his results exactly to cases of fever in human patients. Heretofore, in searching for carbonic acid in the excretions, the expired air only has been examined, and the gas contained in the other secretion has been overlooked.

The urine in these experiments was drawn into vessels carefully cleaned and from which the air had been exhausted by the air-pump, and its quantity was ascertained by weight and noted. The quantity of oxygen and of carbolic oxide contained in urine is so small that it was overlooked in the estimates of the amount of carbonic acid present, Numerous observations were made, and the fact most clearly established that for the same individual, *cæteris paribus*, the amount of carbonic acid in the urine in fever is greater than in health, and, further, that the evacuation of carbonic acid in its increase and diminution keeps pace with that of the urea. This parallelism is to be expected, since, although part of the carbonic acid comes from oxidation of the albuminates, another part of it has its origin in the consumption of hydrocarbons and fats, and this latter source is the one which is the more important in health. These results must be looked upon as the expression of the increased metamorphosis of tissue in fever, and, since it has been shown that the carbonic acid has its origin in the tissues and not in the blood, it follows that the increased carbonic acid observed in fever likewise has its source not in the blood, but in the tissues.—*Dr. C. Anton Errald.*

On Continuous Discharges after Delivery.—Dr. A. Wiltshire says that these discharges are most common among patients of the poorer class, who are, by the exigencies of their lives, obliged to rise too soon from the lying-in couch, and who are, moreover, as a rule, sadly underfed, not only at and during childbirth, but before and after. More rarely are they met with in higher ranks of society, chiefly in constitutionally delicate women, or in persons who have become weakened by too rapid child-bearing, or other debilitating causes. All classes alike are apt to blame their medical attendant for the persistence for some time of sanguineous discharges, in the belief that they are due to negligence or want of skill on his part.

The cause of this condition is due, in the great majority of, if not all, cases, to subinvolution of the uterus.

Involution should progress equally in every part of the womb, so that at the end of the process the normal relative proportions should be maintained; especially does this apply to that portion corresponding to the placental site where the uterine wall is thicker than elsewhere. It is here, however, that the process most often fails, leaving a surface prone to discharge blood and other fluids; and it is here, the author believes, that the persistent "colored shows" and "waters" mostly originate.

These cases are characterized by the persistence, with it may be occasional remissions or intermissions, of a sanguineous (red or greenish) flow; which sometimes weakens the patient to the extent of interfering with lactation. Subinvolution is liable to persons affected with heart disease and chronic diseases which are accompanied with marked congestion of the venous system, as chronic bronchitis with emphysema, congestive liver diseases, etc. Feverishness hinders involution, and Joulin says the process does not actively set in until the pyrexia due to the establishment of lactation has passed away. It is, therefore, important to arrest all pyrexial complications. As regards the constitutionally feeble, in whom all vital processes are slow, absorption and restitution are not likely to progress very rapidly when the debility, which is normal to such persons, is intensified by the exhaustion of parturition, and the usual insufficient or improper diet to which lying-in women are commonly condemned. For such is a liberal diet especially useful.

Bi-manual palpation and measurement show in these cases excessive bulk. Ordinarily this co-exists with increased length, but cases have been noticed in which the length of the axis was normal while the uterus was broader. On the relation of flexion and version to this condition Dr. Wiltshire does not lay much stress, remarking that "such accidents do occasionally complicate these cases, and aggravate them considerably."

Under the head of preventive treatment the writer impresses the necessity of prohibiting too early rising, and next, regulation of the diet, the quality of which should be inversely proportionate to the quantity taken, due regard being had for the existence of fever, as determined by the thermometer, the habits and inclinations of the patient, and her intention to nurse the child or not.

Under the head of curative treatment he recommends the recumbent position, a firm bandage to the lower belly, and rich diet. Occasionally cases are seen in which there is an excess of nutrition, and subinvolution disappears under a regulated diet, potash or lithia, and aperients, and anti-rheumatic remedies in patients of that diathetis. Ergot is recommended, and digitalis and strychnia in some cases complicated with heart lesions. Very striking results have followed the use of quinine, as suggested by Monteverdi. Gueneau de Mussy, at the Hotel Dieu, has of late used it with considerable success in eight-grain doses for atonic menorrhagia.

Some patients, where nutrition appears to have failed seriously, improve wonderfully under arsenic. Anodynes, especially opiates, should be sparingly used. Syrup of iodine of iron is recommended as a tonic, sulphate of magnesia to keep the bowels opened, and local application of iodine to the hypogastrium when there is much pain. Injections, if used, should be copious, and the writer prefers cold to hot ones. Astringents may be introduced into these injections, if necessary, and good may often be derived from hip-baths, the author having a high opinion of sea-water for this purpose, as well as for injections.

A Peculiar Form of Dysmenorrhœa.—Dr. George H. Kidd, Vice-President of the Obstetrical Section, calls attention to an unnoted form of dysmenorrhœa. Having sketched the general history of the disease, he proceeds :

I have thus sketched the history of dismenorrhœa caused by obstruction to the exit of the menstrual fluid, chiefly from the facts recorded in my own case-books. From the same source I have now to describe another form of the disease, one in which the symptoms are so different that it is impossible they can depend on the same condition. In these cases the disease, instead of being usually congenital, is always acquired. It may be in early girlhood, or it may be after having given birth to several children. In one case the patient had been married eighteen years and had no family. "While at school, through neglect," she said, "uterine disorder commenced, and has continued without intermission ever since." In another case, the patient had been married six years; she had had two children, the youngest nearly four years old. She had not nursed either. She had never recovered thoroughly after the birth of her last child, but it was only within the last year menstruation became painful. In another, the disease set in after the birth of her third child. The patient became pregnant a fourth time, and nursed this child three months; but she was in bad health all the time of her pregnancy and while nursing. When menstruation returned, after weaning the child, it was as painful as ever. In many cases, the disease supervenes on the mechanical dysmenorrhœa, but the symptoms are so different that the patient can herself tell when this took place.

In the former group of cases, the pain commences simultaneously with the discharge or after it has appeared. In this the pain begins a week or ten days, or more, before menstruation, and at the same time that the pains occur in the pelvic region the breasts become painful, hot, swelled, and tender to the touch. The pelvic pains are spoken of as dull, achy pains; they are felt in the pelvic region, and extend down the thighs to the back. They are not the acute paroxysms of pain of the former cases; they are aggravated when menstruation actually begins, and often continue throughout the whole period, but more frequently are relieved as soon as the discharge is established. They then cease, and return on, it may be, the fourteenth day; that is, at the middle of the interval. This "intermediate pain," as Dr. Priestley calls it, may last only a few days, or it may continue and increase in severity till the next menstruation, the only interval of ease being for the first ten or twelve days after menstruation.

Menstruation in these cases is often irregular, generally retarded; sometimes it comes too soon, and in some cases a whole month may be passed over, but the pain occurs when the menstruation is due, even though the discharge does not appear.

The discharge is generally scanty, but sometimes it is excessive. Its appearance is almost always preceded or followed by severe headache, often by vomiting, and, during its flow, palpitation is often complained of, also frequent micturition, and sometimes tenesmus and kneading in the rectum.

Miss H. states that menstruation has always been painful during the first two or three hours, but for the last two or three years she has suffered very much from pain for a week before menstruation begins, and at the same time her breasts have also become very painful. She has had much palpitation lately, and severe headaches before menstruation begins.

Mrs. W., married seven years, no children, states that menstruation was always painful at the beginning, but, since marriage, she has suffered for a week before it begins, from pain round the sides, stomach, and back, and from pain in her breasts, which become swollen. About five years ago the os uteri was slit, after which she became pregnant, but aborted at the end of the third month. The painful menstruation continues, notwithstanding the operation and pregnancy. These were cases in which the form of dysmenorrhœa, of which I now speak, supervened on that due to obstruction; on examination, in this latter case, the uterus was found normal in position and size. The os and cervix were quite healthy, but the os was very open in consequence of the operation that had been performed on it. The right ovary, however, was found to be swollen, and very tender to the touch.

In many cases, in addition to the symptoms already described, there is a constant dull, aching, sickening pain in the back; and there is so much pain *in coitu*, that all attempts at intercourse have to be given up. Mrs. C. has been married ten years, and has no family. For many years she has had painful menstruation, the pain beginning more than a week beforehand. The os uteri was twice slit, without in any way relieving the pain of menstruation. She had also had the orifice of the vagina dilated, for the pain *in coitu*, but without benefit. On examination, the vagina admitted a full-sized speculum with ease; there was no contraction or spasm at the orifice. The uterus was found with the cervix slit, but otherwise healthy, and the right ovary was found lying in Douglas' space, somewhat enlarged and tender to the touch, the pain, on pressure on it, being of the same character as that caused by intercourse.

Grafting the Skin of a White Man upon a Negro.—I was called in February, 1872, to see James Pearce, a negro, who had been shot in the face by the accidental discharge of a gun. The gun was loaded with bird-shot, and, as Pearce was only a few feet from its muzzle, the discharge passed through the left cheek almost in as compact a mass as a solid ball, entering just at the outer border of the orbicularis muscle. The shot made a wide and deep furrow through the soft parts, completely severed the masseter muscle in its middle, and escaped at the posterior border of the ramus of the inferior maxillary bone, just below the lobule of the ear. The buccal mucous membrane and the bone were uninjured; but the wound involved all the structures lying exteriorly to them, and, as by retraction of the severed tissues the lateral dimension of the wound was considerably increased, it presented a horrible appearance, the ghastliness of which was increased by the charred and blackened effect of the burning powder.

An effort was made to contract the limits of the wound as much as possible, by approximating its sides as closely as could be done with adhesive strips and bandages; but, notwithstanding all the care that was taken, the sloughing was so extensive that there resulted a deep, disfiguring wound, of irregular shape, and covering nearly the whole left cheek.

To expedite the healing process, and to prevent, as far as possible, the disfigurement of an extensive cicatrix, I proposed to graft skin into the wound as soon as it presented a healthy granulating surface. This proposition having been assented to, I performed that operation in March, about four weeks after the injury was received.

Whilst making preparations for the operation, the idea of grafting the skin of a white man upon a negro occurred to me; and, having obtained the consent of my patient to the procedure, I clipped from my own left forearm a piece of skin about the size of a dime, for the purpose. I also took a piece from his forearm, intending to graft both white and black skin.

These pieces of skin were divided into small fragments about the size of canary-seeds, and four of each kind were carefully inserted into the surface of the wound.

On the tenth day, the bandages and strips of plaster which held the grafts *in situ* were removed, and six of the eight grafts were discovered to possess vitality and to encourage the hope of success.

Unfortunately, that day, after the dressings had been changed, my patient got on a "spree," and, whilst intoxicated, destroyed four of the grafts. Happily for the success of my experiment, of the remaining two, one was white. These grafts grew finely, extending themselves in all directions, and assisted materially in closing the wound, which was quickly done.

Besides the wish to heal the wound as speedily as possible and with the slightest amount of cicatricial contraction, considerable interest was felt in the result of the experiment—which, so far as I am informed, had never been done before—of grafting the skin of a white person upon a negro. It was a source of gratification, therefore, to witness the growth of the white graft, and I watched its progress with peculiar pleasure. From the size of a canary-seed, it increased to the extent of about a half-inch in its greatest dimensions, and was of irregular form, with narrow points extending into the surrounding black surface.

Meeting Pearce on the road after the wound had healed, I readily distinguished the white patch in the side of his face, twenty to thirty yards distant. Upon examination at that time, dark-colored lines, forming a net-work in the white skin and giving it a purplish tinge, were discerned. These, I supposed, were blood-vessels. These vessels increased in size and number, producing a corresponding deepening of the color of the patch, until by the end of the third month the whole surface of the wound was of a uniform blackness. The white skin had lost its distinguishing characteristics.

Does not this experiment prove that the coloring-matter of the skin, its pigment, which varies in quantity in individuals as well as in races, is due to cells which are developed in the liquor sanguinis, and not to any peculiarity in the cells of the skin itself?—*By G. Troup Maxwell, M. D.*

Editorial.

Award of Merit.—The first medals have been awarded to H. M. Merrell & Co., by the Cincinnati Industrial Exposition for 1873, just closed, for the best chemicals and the best pharmaceutical preparations of their own manufacture—two silver medals, at the same Exposition, over all competition. The judges appointed to examine this class of articles were Drs. E. S. Wayne and J. S. Unzicker, two of the best chemists in the country, and both practical pharmaceutists and gentlemen of undoubted integrity and ability. This is another testimonial of the purity and high standing of the articles of this house, who have been, for the last twenty-two years, doing all in their power to manufacture pure and reliable articles, so that the profession might be able to get such drugs as could be relied upon.

Clinical Lectures on Insanity.—At a recent meeting of the Academy of Medicine of this city, Dr. Tate suggested the importance of clinical lectures on insanity, to be given during the summer at the Longview Asylum. To this end he asked the co-operation of the Academy, and a committee—Drs. Tate, Muscroft, and Carson—was appointed to memorialize the legislature to make it obligatory on the part of the superintendent to give a course of clinical lectures during each summer at the Longview Asylum. We heartily indorse the views of Dr. Tate, as expressed at the Academy, that the profession should insist upon the utilizing of our asylums for clinical purposes. As stated by Dr. Juler, lectures on insanity are the general custom in the asylums of England.

A Mutual Benefit Society is proposed by Dr. Muscroft—an association of physicians, for protection and benefit in case of death; each member to pay a specified amount in case of the death of an individual member. Drs. Muscroft, C. G. Comegys, and A. S. Dandridge were apointed by the Academy to prepare a plan for carrying out the views expressed by Dr. Muscroft.

College Matters are at about their usual state of full classes and satisfactory prospects for the winter. At the Miami Medical College, Prof. J. C. MacKenzie delivered a very able and carefully prepared introductory. His topic, having reference in general to means of diagnosis, gave especial prominence to claims and value of the microscope. The lecture-room, as usual on these occasions, was filled with the friends of the college, physicians, ladies, and gentlemen.

A new Book.—Dr. A. D. Williams, now of St. Louis, and formerly of this city, has a new book in the press of Robert Clark & Co., on *Diseases of the Ear*. During the past year we have had several contributions in the LANCET AND OBSERVER from Dr. Williams, which were extracts from this forthcoming volume. The work will be illustrated with suitable wood-cuts and one lithograph ; and from the well-known ability, zeal, and industry of Dr. W. we anticipate a valuable addition to our knowledge of the anatomy, diseases, and treatment of the ear. The book will be forthcoming in a few days.

Personal.—More than a year ago Dr. Wm. B. Davis, of this city, went to Europe in hope of having his health restored. His many friends in this city, as well as over the State, are gratified to know that he has returned home, and better, that he never appeared in such fullness of health. He is, of course, regularly settled down to his usual professional work. A year abroad with so good results amply repays the investment.

Prof. J. B. Hough, who is elected to the Chair of Chemistry in the Miami Medical College, has regularly entered upon the performance of his college duties. He proposes to devote himself largely, if not exclusively, to studies and work in his department. We call attention to his card, which will be found in our advertising department. Prof. Hough may be addressed at the college laboratory during the last half of each week.

St. Nicholas.—Such is the title of Scribner's new monthly for girls and boys. No. 1, for November, is at hand. If the old folks don't feel like sharing the good things of this new candidate for the favor of the young folks, we are greatly mistaken. The letter-press execution, the paper, illustrations, etc., are simply as good as can be. Price is $3. The *Monthly* also enters upon a new year with the November issue, and fully maintains its high standard.

Vaccine Capillary Tubes.—Mr. Chas. Smith, Seventh and Main streets, of this city, has laid us under obligation by sending us a supply of vaccine tubes. They are warranted to be pure, and they are reliable for any length of time, being hermetically sealed. Mr. Smith has a full supply, just received from a reliable source in Germany.

Married.—On Tuesday, October 28th, at the residence of the bride's parents, by the Rev. Dr. H. Moore, Dr. S. C. Ayres and Miss Louise McLean, daughter of S. B. W. McLean, Esq., all of this city.

Reviews and Notices.

A Manual of Medical Jurisprudence. By ALFRED SWAYNE TAYLOR, M. D., F. R. S., etc. Seventh American edition. Revised and edited by JOHN J. REESE, M. D. Philadelphia: H. C. Lea, 1873.

The Principles and Practice of Medical Jurisprudence. By ALFRED SWAYNE TAYLOR, M. D., F. R. S., Fellow of the Royal College of Physicians, etc., etc.. Second edition. Philadelphia: H. C. Lea, 1873. Price $6.00.

These volumes are to be regarded by the critic as essentially the same thing. The two volumes of the "Principles and Practice" are the full, matured views of Dr. Taylor; the single volume, so well edited by Dr. Reese, is a condensed view of the same subject and work. In the larger work we have more complete details as to the effect of poisons, and the importance of wounds, injuries, and the like; so, too, we find a more careful analysis of the importance and value of medical evidence detailed in the larger work: but after all, the important matters are alike detailed in the larger as well as the abridged work. All practitioners are liable to be called upon as experts, in courts of justice, to determine matters affecting the life and liberty of their patrons, and they will need a work of reference to refresh their opinions. There is no authority upon these points so reliable as that of Dr. Taylor.

A Manual of Practical Hygiene. Intended especially for medical officers of the army, and for civil medical officers of health. By EDMUND A. PARKES, M. D. F. R. S., Professor of Military Hygiene in the Army Medical School, etc., etc. Fourth edition. Philadelphia: Lindsay & Blakiston, 1873.

The volume before us is exactly what it purports to be—a full and comprehensive treatise upon hygiene, especially matters of hygiene affecting the health of armies, together with instructions as to the duties of the medical officer. In 1857, a royal commission was appointed "to inquire into the sanitary condition of the army in England." This commission prepared a new edition of the Queen's Hospital Regulations. It recommended the establishment of the army medical school, and in fact very thoroughly changed the position, duties, and responsibility of the army medical officer; also, we have this large work prepared by the advice of the same commission, giving expression to these varied points. The work has chapters upon water, air, food, ventilation, beverages, soil, clothing, climate; the disposal of the dead, disinfection; matters affecting the various conditions of the soldier, including tents, barracks, equipments, service on foreign stations, service on ship-board, service in war: so that it is a complete work of instruction, to not only the medical officer in the army, but will be found to present much that is instructive to the civil medical man. It is handsomely gotten up and abundantly illustrated.

For sale by Robert Clarke & Co. Price $1.00.

Six Months under the Red Cross, with the French Army. By GEORGE HALSTEAD BOYLAND, M. D., Ex-Chirurgien de l'Armee Francaise. Cincinnati: Robert Clarke & Co., 1873.

This is a more than usually readable little book, full of incident and gossip. The author, formerly a resident of this city, enlisted as an assistant surgeon in the French army, July 25, 1870, and was assigned to duty with that part of the army under Marshal Bazaine. Consequently he had the opportunity of personal observation of some of the most exciting and important operations of the war, especially all the fighting about Nancy and Metz. Dr. Boyland sketches his observations with such life, that the great and terrible events of that autumn seem again transpiring before us. For the most part, however, the little volume is rather a popular book, though many incidental notes of hospital life and affairs will be heartily appreciated by the medical reader. He criticises with a sharp pen much of the management, both of the military and medical arrangements of the war, and draws a sharp contrast with the superior completeness of the German preparations in all respects. It will be read by every one with interest and the pleasure of a romance.

A Treatise on the Diseases of the Eye. By J. SOELBERG WELLS, F. R. C. S., Professor of Ophthalmology in King's College, London. Second American from the third English edition. Illustrated with two hundred and forty-eight engravings on wood and six colored plates. Philadelphia: H. C. Lea, 1873.

For sale by Robert Clarke & Co. Price $7.00.

Treatise on the Diseases of the Eye, including the Anatomy of the Organ. By Dr. CARL STELLWAG (von Carion), Professor of Oph-

thalmology in the Imperial Royal University of Vienna. Translated from the fourth German edition, and edited by Drs. B. St. John Roosa, M. D., Charles Bull, M. D., and Chas. E. Hackley, M. D. Fourth revised and enlarged edition. Illustrated by wood-engravings and chromo-lithographs. New York: Wm. Wood & Co., 1873.
For sale by Geo. E. Stevens & Co. Price $7.00.

The elaborate table of contents of the above works quite fully express their value and character, even if they were not well-known authorities upon diseases and treatment of the eye. Both of these works have been before the ophthalmic portion of our profession for a long time, and are well known and appreciated. Both of them have been fully and favorably noticed in this journal as previous editions have appeared. The work of Mr. Wells may be regarded as representing the very best of the eye surgery and pathology of England, while in like manner Stellwag is now the classical representative of this department in Germany. We presume no one desirous of the elaborate study of this department could go amiss in selecting either of these very thorough and complete works; each, in its own way, fully presenting to the practitioner the most full and recent teachings as well as experience on ophthalmology.

Chemistry, Inorganic and Organic. By C. L. BLOXAM, Professor of Chemistry, King's College, London, etc. From the second London edition. 8vo., 700 pp. Henry C. Lea: Philadelphia. Just ready.

It would be difficult for a practical chemist and teacher to find any material fault with this most admirable treatise. The author has given us almost a cyclopedia within the limits of a convenient volume, and has done so without penning the *useless* paragraphs too commonly making up a great part of the bulk of many cumbrous works. The progressive scientist is not disappointed when he looks for the record of new and valuable processes and discoveries, while the cautious conservative does not find its pages monopolized by uncertain theories and speculations.

A pecular point of excellence is the crystallized form of expression in which great truths are expressed in very short paragraphs. One is surprised at the brief space allotted to an important topic, and yet, after reading it, he feels that little, if any more, should have been said. Altogether, it is seldom you see a text-book so near faultless. J. B. H.

Transactions of the Indiana State Medical Society.

This is a well-printed pamphlet of 145 pages of matter, "embellished" on the outside with the seal of the State Society. Whether $125 have been expended on this "embellishment," as the society resolved, at the suggestion of Dr. Ayres, I am unable to say; but this much may be truly said, that nothing shows so clearly the propriety of the proposition of Drs. Weist and Woodworth, to do away with the printing of the Transactions altogether, unless something more creditable to the profession of the State can be produced than this collection. Most of the papers are good enough for a medical journal, and have at least one merit, *i. e.*, brevity; but that there is anything new or interesting to the profession in any one of the articles is so obvious, on a careful examination of them, as not to need mention. First, we have an address of the president, beginning with the price of pork, potatoes, beef, turnips, etc., forty years ago. This is well calculated to make us, who are troubled with the "res angustæ domi," feel badly, and sigh for those good old times; but that it is interesting in a medical or surgical point of view, I can not see. The most of the address, however, is taken up with biographical sketches of Wayne county doctors, most of whom (I except Drs. Plummer and Mendenhall) were never heard of outside of that county. These reminiscences would be well enough for an address before *that* county Medical Society, but, it strikes me, very improper for an address before the State Medical Society. If the President had a general acquaintance all over the State (which he has not) with its best known physicians, and had mentioned some of them in various parts of the State, it might have been well enough. The address ends very abruptly, thus—"The early physicians of Connersville, Fayette county, to the best of my recollection, were Drs. Moffet, Gale, and Miller; a little later we had Drs. Brown and Mason, who were partners in the practice of medicine for some years." In short, the address would do very well for a pioneer association of agriculturists, but for the edification of learned doctors I consider it malapropos.

The next paper is by Dr. Kersey, on an obscure disease, *supposed* to be chronic glanders. The case is interesting, but the journals (the English especially) are full of cases of glanders on the human subject, and I see nothing particularly new or useful in the case, and as no post-mortem examination was made, I see nothing in the case to warrant its printing in a volume of transactions of the State Medical Society. The next paper is

"A Report on Diseases of the Eye and Ear." We should expect, in a report on diseases of the eye and ear, something more than an account of four cases—interesting enough *per se*, but hardly of sufficient interest to be embalmed in the Transactions. I had a case analogous to his foreign body in the ear recently. Mine was a wild locust seed in the ear for five years, producing perfect deafness of that ear.

The next paper is on cholera infantum, by Dr. Duzan, of Zionsville. This paper is remarkable for its grandiloquent verbosity, and its circumlocutory language and bad Latin is its only prescription. I can not see that it has added one solitary new principle to the voluminous writings by Western physicians on this disease. If he had only mentioned one thing, which some eminent French physician, I forget his name, recommends in those cases, when head symptoms supervene—I mean *hot* mustard baths, long and frequently repeated, the efficiency of which I tested in a dozen cases the past summer—his paper *might* have been of some use; but as it is I can see nothing in this paper but the chance for Dr. Duzan to air himself in a very gaseous way.

The next paper is by Dr. Field on "The Expectant Mode of Medication." The doctor is a pretty good preacher, I have heard, and a man of good common sense, and nothing can be said against the doctrine he inculcates; but what he has said has been said a thousand times over by Dr. Holmes, our own Dr. Hibberd, et al., and I can only object to his prescription: there is, by the way, a typographical error in it; for instance, aquæ camphoræ, ʒii—I suppose it means ℥ii. But it savors of an obsolete practice to prescribe tartar emetic. I have no doubt the doctor will find just as good, if not better effects, if he leaves the antimony out.

I reserve the other papers for a review hereafter. I do n't wish to be understood as saying that some of the cases mentioned in some of the papers are not remarkable cases—anomalous, if you please—but the question is: Has any new light been thrown upon physiology, pathology, or therapeutics? The Transactions are remarkable, also, for an absence of any surgical case, except the ligation of a polypus, nor do I mean to say that these Transactions do not compare favorably with the more pretentious ones of the American Medical Association, nor that the present one is not superior to most of its predecessors; for I believe that all these things can be said, and yet we can give no reason for printing them as the combined medical wisdom of the State. M. D.

THE CINCINNATI

LANCET AND OBSERVER.

E. B. STEVENS, Editor.

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Original Communications.

Art. I.—Epidemic Cerebro-Spinal Meningitis.

Report read before the "Miami Valley Medical Society." By THOMAS C. MINOR, M. D.

HISTORICAL.

"*Rien n'est plus vague que le sens medical du mot epidemie. On confond sous ce titre toutes les affections populaires.*" Fuster.

It is my intention in this short paper to treat of the history of what is known as *epidemic* cerebro-spinal meningitis. I use the word "epidemic" in this connection for the reason that this special disease was only recognized and described by writers when it had appeared, not as in a sporadic or isolated form, but as a pestilence, in which a large number of persons were attacked at the same time by a disease, whose peculiarity was the similarity of its particular symptoms; thereafter, the malady, so accurately described by acute observers during its prevalence, assumed its proper name and place in the nosological scale.

Sporadic cases of cerebro-spinal meningitis have probably occurred ever since the human being was endowed with a cerebrum, spinal cord, and their usual coverings, providing always, of course, that the ambiguity known as inflammation shall have existed from primeval times. Histographers of this disease have always sought the *ab initio* literature of medicine, in order to prove that Æsculapius, Galen, and Hippocrates, Aëtius, Avicenna, Savonarola, Vesalius, Morgagni, and in fact most of the ancient and older writers, knew all about the malady in question. The truly beautiful and correct portraitures of disease in its varied forms and colorings, as painted in verbal sketches by the more ancient authors, enable an individual, so inclined, to compare the disease of the present and that of the past with the greatest possible facility, and without any great stretch of the imagination, he can see a striking resemblance between what was written by the "old man of Cos" in the year blank B. C., with what is written by plain Dr. Brownjones in the year of our Lord 1873. Andrew Vesalius and Morgagni were both undoubtedly magnificent anatomists and pathologists, and the pen pictures of disease, as drawn by the latter especially, have never been surpassed. It is not surprising, therefore, to find all histographers of cerebro-spinal meningitis referring to Morgagni after having given us obscure passages from the ancients. Morgagni's* tenth epistle, article 17, is the one most frequently quoted as being proof positive that the great Italian anatomist perfectly understood the disease under discussion. Let us look at this case for ourselves before we take the word or opinion of any man that it was one of cerebro-spinal meningitis:

"A young man of one and twenty years of age, and by trade a wool-comber, was seized with a violent fever, to which a delirium also was added, so that it was necessary to tie him down in bed. His delirium having some remission, he was brought into this hospital, where convulsive motions of his upper limbs and subsultus tendinum in both his wrists were observed; in the blood, however, taken from him, no inflammatory crust appeared, but its substance was very dense and compact. A heavy soporific disorder also came on, so that for the last three days he lay without speaking a word and then died."

About the middle of March, 1745, Morgagni made an autopsy in this case, and the following are some of his notes: "We saw the vessels that creep through the pia mater on the *posterior part* of the left hemisphere of the brain to be distended with black blood. The brain being dissected was found to be *very hard*, and showed up and down the medullary substance bloody points," etc. "Yet it is certain there was at the same time a large quantity of water, especially about the spinal marrow," etc. "And in this water nothing forbids us to suspect a power of vellicating the meninges." Morgagni rightly attributes to some of these lesions the cause of the convulsive movements observed, for this case comes under his celebrated chapter on "convulsions and convulsive movements." In this same chapter, also, he gives the histories of cases of many years' standing where he found the identical lesions as in case 17. If we can believe that cerebro-spinal meningitis may exist in a chronic form and last for an indefinite number of years, it will be an easy matter to convince ourselves that Morgagni's cases were cases of the much-dreaded disease. I doubt exceedingly, however, whether any modern pathologist, taking the pathological history of case 17, could be induced to believe that the inflammation of the brain in cerebro-spinal meningitis is unilateral and localized exclusively to the base, and that the brain substance is "very hard," with a complete absence of pus. I only use this one case to show how reckless medical histographers are apt to become in their eagerness to show their familarity with olden medical literature. A careful investigation of some few of these many cases quoted from the ancient writers, will only serve to convince one that they knew little or nothing of the disease, even in its sporadic form. According to Köhler,[*] whose celebrated monograph on the subject of cerebro-spinal meningitis has been a sort of fountain-head from which histographers of the disease have imbibed so much of their inspiration, we are especially indebted to Peter Frank,[†] as being one of the first pathologists who contributed largely to the subject of spinal meningitis, as it existed in its sporadic form. The year 1792, the time Frank's book made its first appearance, marks the beginning of a new era, at least in the study of the various lesions of the brain with its spinal cord and coverings; but still we see nothing of the disease known as epidemic cerebro-spinal meningitis. Let us then lay aside all these musty and antiquated tomes. References to them will show perhaps a similarity of symptoms and lesions with those of the disease under discussion, but a critical and unbiased mind will inevitably pick out the flaws; and although these descriptions of disease are magnificently drawn by the ancient *savants*, it is easy to see the diseases they describe have no connection whatever with the malady known as epidemic cerebro-spinal meningitis. So, shelving the ponderous compilations of the most celebrated authorities of the past, we shall search for light amongst the more original authorities of the later present for a solution of this historical problem; understanding, in the meanwhile, that the disease referred to shall be strictly cerebro-spinal meningitis in its epidemic form. According to Stille,* Bascombe, in his "history of epidemic pestilences, speaks of a local epidemic at Roettingen, in Franconia, in the year 1802;" again, epidemic meningitis is said to have been described by Vieusseux, in 1805. From 1805 to 1816, epidemic meningitis prevailed throughout the present German Empire, Holland, and France. It appeared in epidemic form at Medfield, Massachusetts, in the year 1806, and at Hartford, Conn., in 1809. In 1830, it appeared in England, and three years later (1833) in Italy. After a lapse of four years it prevailed in different localities for the following thirteen years, or until the year 1850. During this time its ravages were most felt in France, Italy, Algeria, and even as far down as Gibraltar. In the north, Denmark, Ireland, and England felt its power. In this country,† from 1842 to 1850, it appeared in the following localities: January, 1842, in Rutherford county, Tennessee; Montgomery, Alabama, in February, 1842, lasting until the following May. In the fall and winter of 1845, at Mt. Vernon, Illinois. January, 1847, at Vicksburg, Mississippi, continuing until the end of the following month of March. In February, 1847, in Hardman county, West Tennessee, continuing until spring. 1847, at Bentonville, Arkansas, and also in Union county, in the same State. In January and February, it attacked a regiment of United States troops stationed in the neighborhood of New Orleans, and in 1850 it appeared in the same city. During this same time it also appeared at various points in the States of Kentucky, Pennsylvania, Massachusetts, and New York. Dr. Drake (*loc. cit.*) states that, "It has not, I think, been described among the epidemics of the Atlantic States." Dr. Drake evidently had never seen or heard of a little monograph, by Thomas Miner,* M. D., of Middletown, Conn., which gives one of the clearest accounts of epidemic cerebro-spinal meningitis on record. Dr. Miner, also, was one of the earliest medical writers who came to the conclusion that the disease was not ordinary typhus. On page 19, he says: "This epidemic, very obviously, was not common typhus, as that term is intended to include the nervous and putrid fevers of the older authors. What then was it? It has been questioned whether it was nosologically the same as the Hartford spotted fever of 1809," etc. Dr. Drake is also mistaken in asserting that the disease never occurs north of the thirty-ninth parallel of latitude. To show how far ahead of his time Dr. Miner was in his idea that the disease was not typhus, it is only necessary to state that up to 1839, most all the European authorities we come across confound the epidemic form of cerebro-spinal meningitis with malignant typhus. Dr. Miner's monograph was published, be it noticed, in 1825. In 1839, Dr. Lefevre,† a French physician, noticed the disease as it prevailed in Rochefort, France, and came to the conclusion that it was something different from typhus; his book passed unnoticed for several months, but finally attracted the attention it merited. Up to 1840–41, then, very few medical men in the various localities which suffered from epidemic cerebro-spinal meningitis but supposed they were dealing with typhus, although they considered the disease to be of an extraordinarily malignant type. It is from the various histories of so-called epidemic typhus that we draw our conclusions in relation to epidemic meningitis, it having prevailed for such a long period, and having in the meantime been confounded with typhus as before mentioned. This fact is generally acknowledged by the later medical writers on the subject. In 1840, then, the disease known as epidemic cerebro-spinal meningitis became duly recognized and fully asserted its claim as to being a *particular disease*, if I may be allowed to use such a term. The curious reader, in glancing over the old files of American and foreign journals dating from 1840 to 1855, is somewhat astonished at the immense number of medical writers who have devoted special attention to the subject under discussion. Like everything new,

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* De sedibus et causis morborum per anatomen indagatis. Translation of Benjamin Alexander, London, 1769. Or refer to "Recherches Anatomiques sur le siege et les causes des Maladies. Morgagni. Traduit par Desormeaux. Tome ii, p. 61. Paris, 1821."

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[*] Monographie der Meningitis Spinalis nach Klinischen Beobactungen, Hermann Kohler, Leipzig, 1861.

[†] Frank (De vertebralis columnæ in morbos dignitate). Delect. Opuc. Tome xi, Ticini, 1792.

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* Epidemic Meningitis, or Cerebro-Spinal Meningitis. Alfred Stille, Philadelphia, 1867.

† Refer to Drake. "The Principal Diseases of the Interior Valley of North America." Philadelphia, 1854.

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* Typhus Syncopalis. Sinking Typhus, or the Spotted Fever of New England. Thomas Miner, Middletown, Conn., 1825.

† Recherches historiques sur la maladic quia regne au bagne de Rochefort pendant les premiers mois de l'annee, 1839. Lefevre: Paris, 1840.

it attracted general attention, and in attracting this attention it received the careful investigation that such a serious disease justly merits. The French literature on the subject during the period named is especially voluminous and exhaustive; the German literature during the same time is scarce. This latter circumstance, however, is owing to the fact that prior to 1860–61, cerebro-spinal meningitis did not prevail to any considerable extent in Germany, and hence the medical men of that great country had no chance to investigate it. It is but just to state, however, that since 1860–61, the Germans have made up for lost time in this respect, as witness the elaborate researches of Köhler, Hirsch, and others. In order to refer to the more important epidemics prevailing from 1840 to 1855, it is then necessary to consult the French literature, as it is the most complete for the period specified. On consulting the literature regarding the subject, we find, then, that in 1839 epidemic cerebro-spinal meningitis prevailed all over France, as the disease has been clearly described by various writers, as it occurred at the following points: Bayonne, Narbonne, Foix, Bordeaux, Metz, Avignon, Strasbourg, Perpignan, Poitiers, Nancy, Nantes, Lyons, finally at Versailles, near Paris—an epidemic fully described by Dr. Faure Villar,* who, in his monograph, analyzes 504 cases, and gives the results of some sixty autopsies. These were the cases where worms (vers lombric) were so often vomited, and also appeared in the stools. Dr. Rollet,† in his memoir, says he met with but two cases of intestinal worms during the epidemic at Nancy. Lefevre observed no worms at all in his cases, neither did Mouchet, who described the Lyons epidemic. The Lyons epidemic of 1846 is fully described in a monograph by Dr. Chapuy. In 1847–48, Orleans, France, suffered severely. In 1849, the dreaded disease reached Paris: it is at this point we pause. The French medical literature of this date in regard to epidemic meningitis becomes so voluminous, that it would be useless to wade through it, as it would take forever to reach the opposite shore of our argument, and in place of making a short paper for us, we should have several volumes on our hands; therefore, with a notice of Dr. Boudin's‡ elaborate memoir, published in 1849, we shall drop the history of the epidemics of France. Dr. Boudin's work will amply repay the student who is in search of statistics of these epidemics. From him we learn that up to 1849, the date his memoir was published, epidemic cerebro-spinal meningitis had occurred in France and other places during the following months of the year:

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* Histoire de l'epidemic de meningite cerebro-spinal observe a l'hopital militaire de Versailles en 1839. Par Faure Villar, Paris, 1844.

† De la meningite cerebro rachidienne et de'encephalo meningite epidemique. Rollet, Paris, 1844.

‡ Archives Generales de Medecine, April, 1849. Also refer to "Archives Generales de Medecine" of August, 1849, 4th series, p. 466, et seq.

January	26 times.	July	9 times.
February	29 "	August	8 "
March	19 "	September	7 "
April	18 "	October	9 "
May	12 "	November	15 "
June	15 "	December	20 "

M. Boudin gives the mortuary lists of many of the epidemics, with notes and references to the monographs of Tourdes, Chauffard, and Forget, and many other of the French writers on the subject. He also gives a full history of the great epidemic of 1814, which prevailed all over Europe. Under the heading "cerebro-spinal arachnitis," Dr. Robert Mayne* describes the disease which prevailed in Ireland during the months of January, February, and March, 1846. The disease was first noticed in Ireland, however, by Dr. Darby, of Bray, who reported his cases in detail to the "Surgical Society of Ireland" on the 21st of March. This epidemic was noticed at three different parts of Ireland, at about the same time, *i. e.*, Bray, Belfast, and Dublin. Again, in 1865, the disease appeared in an epidemic form in Dublin. England and Scotland so far do not seem to have suffered from any great epidemics of the disease. In 1859, Dr. Day, of Stafford, England, noticed two cases which he considered to be cerebro-spinal meningitis, and latterly (1865), some six or eight cases were observed in London. Commencing in 1860, it prevailed all over Europe, and from 1863 to 1865, Germany was especially afflicted by the pestilence. German medical literature from 1863 to the present time (1873), in regard to this subject, is only to be compared with the French literature of 1840 to 1850. The Kohlers, Klebs, Hirschs, and Meissners, along with many future Niemeyers, have filled up the void so long existing in German medical literature on this special subject, and it is saying but little to add, that the Germans have so far surpassed all others in the gifts they have bestowed on our dear science of late years. . . The epidemic cerebro-spinal meningitis of 1860 has left its lingering and baleful sparks here and there over our own broad expanse of country, and ever and anon the disease is again lighted up at various points, and although we have no great epidemics in cities, still we hear now and then of some hamlet or town which suffers from its fearful devastations. The Western and Southern States have especially suffered, and almost every practitioner in the sections named has seen some cases of the dread disease. The journals contain references to and reports of cerebro-spinal meningitis in plenty, as you are all no doubt aware. Statistics for the year 1870,* I have carefully arranged in the following table, complied from the "Ninth Census of the United States:"

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* Dublin Quarterly Medical Journal, August 1, 1846.

Mortality of 1870 *from Cerebro-Spinal Meningitis. Males*, 361; *Females*, 290. *Grand Total*, 651.

MALES.		FEMALES.	
Under 1 year	56	Under 1 year	23
1 year	26	1 year	26
2 years	22	2 years	13
3 years	10	3 years	19
4 years	20	4 years	18
Total under 5 years	134	Total under 5 years	99
5 to 10 years	54	5 to 10 years	48
10 to 15 years	50	10 to 15 years	34
15 to 20 years	31	15 to 20 years	38
20 to 25 years	17	20 to 25 years	17
25 to 30 years	13	25 to 30 years	12
30 to 35 years	17	30 to 35 years	8
Total under 35	316	Total under 35 years	256
Ages ranging from 35 to 75	45	Ages ranging from 35 to 75	34
Total	361	Total	290

Grand total, 651.

This table is based on the figures given in the census. These statistics, collected by the "government," are of course very incomplete; but as far as they go, will serve as a basis on which to approximate the losses sustained from the disease. During the same time 1,843 cases of meningitis in males, and 1,491 cases among females, are reported, making a total of 3,334 cases. That some of these cases were undoubtedly intended to be cases of cerebro-spinal meningitis is a very patent fact. Meningitis is not such a common disease in the first place; and in the second case, 1,055 of the male cases and 876 of the female cases, a total of 1,931 cases, are reported as being under five years of age; 520 males and 400 females, whose ages ranged from five to twenty-five years, also perished from meningitis, making a total of 920 cases, which, added to the 1,931 cases under five years of age, makes a grand total of 2,851 deaths from meningitis of patients whose ages ranged from one to twenty-five. The reader may draw his own deductions in regard to this fact; it is sufficient for us to have the cases marked "cerebro-spinal fever" in order to discover what locations the disease was prevailing in during the year 1870. For this purpose I have arranged the following additional table, which I think will be found nearly correct. I have taken the States, and arranged them, as they are placed, in the following geographical sections:

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* "Ninth Census of the United States." Refer to the volume entitled "Vital Statistics."

Mortality of 1870 *in the different States from Cerebro-Spinal Meningitis.*

NEW ENGLAND STATES.

	Males.	Females.
Maine	0	1
New Hampshire	1	0
Vermont	1	1
Massachusetts	5	3
Rhode Island	0	0
Connecticut	1	1
	8	6

Total number of deaths in New England, 14.

MIDDLE STATES.

	Males.	Females.
New York	29	32
New Jersey	2	1
Pennsylvania	10	8
Delaware	0	0
	41	41

Total number of deaths in the Middle States	82
New England States	14
Total	96

SOUTHERN STATES, INCLUDING DISTRICT OF COLUMBIA.

	Males.	Females.
Maryland	1	0
Virginia	0	0
North Carolina	3	1
South Carolina	4	4
Georgia	77	68
Florida	0	0
Alabama	11	11
Mississippi	5	1
Louisiana	12	11
Texas	19	20
District of Columbia	0	1
	132	117

Total number of deaths in the Southern States	249
New England and Middle States	96
Total	345

WESTERN STATES.

	Males.	Females.
Ohio	39	35
Kentucky	29	12
Tennessee	5	1
West Virginia	8	8
Michigan	5	3
Wisconsin	4	1
Indiana	38	37
Illinois	28	15
Missouri	10	5
Arkansas	3	0
Kansas	3	1
Nebraska	1	0
Iowa	3	3
Minnesota	1	0
Nevada	0	0
	177	121

Total number of deaths in Western States	298
New England, Middle, and Southern States	345
Total	643

PACIFIC STATES, INCLUDING TERRITORIES.

	Males.	Females.
California	2	4
Oregon	1	0
Washington, Colorado, Utah, New Mexico, Wyoming, Dakota, Arizona, and Montana Territories	1	0
	4	4
Total	8	

RECAPITULATION.

Total number of deaths in Pacific States	7
New England, Middle, Southern, and Western States	643
The eight Territories	1
Grand total	651

A mere glance over this table will reveal certain curious items to the observer. For instance, if we take the thirty-ninth parallel of latitude. North of this degree we find in their greater part the following States: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, West Virginia, Ohio, Michigan, Wisconsin, Indiana, Illinois, Iowa, Nebraska, Minnesota, and Oregon. In these States the deaths from cerebro-spinal meningitis, roughly approximated, amount to about 326 cases, or just about one-half the whole mortality, showing that the disease is just as prevalent *north* as south of the thirty-ninth degree of latitude—a fact which Dr. Drake rather denied in his book, while speaking of the epidemic of 1842; for he says: "All these localities lie south of the thirty-ninth parallel of latitude, and most of them have a winter mean temperature corresponding to France and Ireland, where the disease has chiefly prevailed. Neither my personal researches in the higher latitudes of the valley, nor a reference to medical journals, affords any evidence of its prevalence in those colder regions."*

Georgia suffered more than any other State: her total mortality was 145, or almost one-half of the entire mortality *south* of the thirty-ninth degree of latitude. Delaware, Virginia, and Florida, *all south* of the thirty-ninth parallel of latitude, escaped entirely. Taking the eastern coast of the United States, from Maine to Texas, and counting the mortality of the different States whose eastern shores dip into the Atlantic ocean or the Gulf, we find in those States, *i. e.*, Maine, New Hampshire, Massachusetts, Connecticut, New York, Maryland, Delaware, Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi, and Louisiana, a mortality of 321, or nearly one-half the whole mortality of the United States. Glancing over a hypsometric map of the "States," we find New Hampshire, Vermont, most of New York, most of Pennsylvania, Ohio, West Virginia, Kentucky, and Tennessee have an elevation of from 800 to 2,000 feet above the level of the sea. Taking the entire mortality of these States on this higher eastern slope, we find it to be 219, or nearly one-third of the whole number; therefore, two-thirds of the deaths occurred at an elevation of from 50 to 800 feet above the level of the sea. The natural deductions from this fact would be, that *the higher the elevation of the locality above the level of the sea, the less will be the mortality or tendency to epidemic cerebro-spinal meningitis.* Looking over a temperature chart of the United States, and taking the annual mean temperature of the various States, we find that Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Northern Ohio, Indiana and Illinois, Iowa, Michigan, Wisconsin, Minnesota, and Nebraska have an annual mean temperature of from 52° to 48° Fahr. Taking the entire mortality of all the above-named States, with the exception of Ohio, Indiana, and Illinois, in which we shall halve the mortality, we find the number of deaths to have been 172; the other 479 deaths occurred in the States whose mean annual temperature ranges from 52° to 68° Fahr. Almost three-fourths of the mortality then occurred in the States where there was the most elevated mean annual temperature. Leaving to the reader who may be curious enough to further analyze our tables the task of so doing, we shall now turn our attention to the disease as it has prevailed in this county, *Hamilton*, for several years past.

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* Dr. Drake (*loc. cit.*), vol. ii, 751, 752.

The first annual report of the Board of Health for the year ending February 29, 1868, makes no mention of cerebro-spinal meningitis. In the second report five cases are mentioned, the first occurring in April, 1868; in the following August, two cases; in September, one case, and in December an additional case; making a total of five cases in the year 1868. These cases might be considered to be sporadic, if, in the following year (1869), there had not followed an epidemic of cerebro-spinal meningitis, which carried off 88 victims (49 males and 39 females; 83 minors and 5 adults). In the following year (1870), the disease had completely died out, as no deaths seem to have been reported in that year. The year 1871 saw the city entirely free from the disease, but in April of the following year (April, 1872), the disease suddenly appeared without any previous warning, and twelve deaths from cerebro-spinal meningitis are recorded for this single month. This was the beginning of the present epidemic of cerebro-spinal meningitis in Hamilton county, an epidemic which, up to January 1, 1873, had caused the death of 74 individuals. From that date (January 1, 1873) to the time this article was written (July, 1873), the disease has been raging, but is now happily on the decline. The following table from the "Health Office"* will give some idea of the daily mortality for the period named:

Mortality from Epidemic Cerebro-Spinal Meningitis, for the six Months ending July 1, 1873.

Total Cases.	January, 1873	11
" "	February, "	20
" "	March, "	29
" "	April, "	47
" "	May, "	58
" "	June, "	28
Last six months of mortality		193

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* I am greatly indebted to Dr. Quinn, Health Officer of Cincinnati, for the free access allowed me to the "Office Records;" also to Mr. Chapman, clerk of the "Board of Health," for aid in compiling this table.

DAILY MORTALITY.

January 13, 1873	2
“ 16, “	1
“ 18, “	1
“ 20, “	1
“ 21, “	1
“ 23, “	1
“ 27, “	2
“ 31, “	2
Total mortality in January	11

February 1, 1873	1
“ 2, “	1
“ 8, “	2
“ 9, “	2
“ 10, “	3
“ 18, “	1
“ 19, “	1
“ 21, “	1
“ 22, “	1
“ 23, “	2
“ 25, “	2
“ 27, “	2
“ 28, “	1
Total mortality in February	20
Total January and February	31

March 3, 1873	1
“ 4, “	1
“ 6, “	1
“ 9, “	1
“ 10, “	2
“ 12, “	3
“ 14, “	1
“ 15, “	2
“ 17, “	2
“ 19, “	1
“ 22, “	2
“ 23, “	1
“ 25, “	2
“ 26, “	1
“ 27, “	4
“ 28, “	2
“ 30, “	1
“ 31, “	1
Total mortality in March	29
Total mortality of January, February, and March, for the first quarter year, ending March 31, 1873	60

April 1, 1873	1
“ 2, “	1
“ 4, “	4
“ 5, “	1
“ 6, “	3
“ 7, “	3
“ 8, “	4
“ 9, “	2
“ 10, “	1
“ 11, “	2
“ 12, “	4
“ 13, “	1
“ 14, “	1
“ 15, “	1
“ 16, “	1
“ 18, “	1
“ 19, “	1
“ 21, “	1
“ 22, “	2
“ 25, “	1
“ 26, “	1
“ 27, “	5
“ 28, “	3
“ 30, “	2
Total mortality in April	47
Grand Total from January 1	107

May 1, 1873	2
“ 2, “	5
“ 3, “	3
“ 5, “	2
“ 6, “	1
“ 7, “	4
“ 8, “	3
“ 9, “	4
“ 10, “	3
“ 11, “	1
“ 12, “	1
“ 14, “	3
“ 15, “	4
“ 16, “	3
“ 18, “	1
“ 19, “	4
“ 20, “	5
“ 21, “	1
“ 25, “	1
“ 26, “	1
“ 27, “	2
“ 28, “	1
“ 29, “	1
“ 31, “	2
Total mortality in May	58
Grand total from January 1	165

June 2, 1873	2
" 4, "	2
" 5, "	2
" 6, "	2
" 8, "	1
" 9, "	1
" 12, "	1
" 15, "	1
" 18, "	2
" 21, "	2
	16
Brought forward	16
June 22, 1873	1
" 23, "	2
" 24, "	2
" 25, "	4
" 30, "	3
Total mortality in June	28
Grand total mortality from January 1, 1873, to July 1, 1873, first half of the year	193

Up to July 1, 1873, this disease is yet prevailing, and so far *the total mortality of this present epidemic has been* 267. Is epidemic cerebro-spinal meningitis dying out in the United States? Glance over the tables I have compiled from the "Census" of 1870, and the answer to the query is frightful. *Epidemic cerebro-spinal meningitis is on the increase all over the country.* The mortality for the last *six months*, or the first half year of 1873, was greater in the city of Cincinnati *alone* than it was in the *entire* New England, Middle, and Pacific States in the year 1870. The disease seems to have traveled *from the East to the West.* Last year (1872) the mortality in the city of Philadelphia was 128, and in New York city and Brooklyn it also prevailed extensively; so the present epidemic, or epidemic of 1872, will probably be long remembered for its severity.

Art. II.—Case of Sarcomatous Disease of Right Antrum, causing Extirpation of the entire Superior Maxillary Bone.

By C. SHRIVER, Bethany, West Virginia.

Mrs. Wm. Morrow, æt. 55, in April, 1873, began to have continued pain in right side of the face. She had medical attention, but very little was accomplished.

I was called to see her about the 1st of June, and diagnosed disease of the antrum. She refused an operation at that time. On the 1st of August (all treatment being futile), she consented. I opened the cavity of the antrum, and removed its contents, which were of a cheesy consistence, and a portion of the front wall; but the disease continued to progress until the patient became a misery to herself and those around her.

At last I told her that an operation for the removal of the entire bone was the last resort; also, that the operation promised but very little, especially at her age, as the disease might return. Her answer was, that she was a misery to herself and others, and did not wish to live in that condition.

On the 15th of September, in presence of, and assisted by, Drs. Cox and Hukill, I removed the entire bone.

I made my first incision from the outer edge of masseter muscle to the commissure of the lips; another from the zygoma at its junction with the malar, intersecting the first at its origin, thus: <; then through the upper lip into the nares; dissected the flap rapidly from its connections, the eye from its adhesions to the infra-orbital bone; then with the cutting forceps divided the bone at its principal points of connection, viz., at the median line, inner angle of the eye, and at the junction of the zygoma with the malar bone; then with straight forceps removed the portions separately. I could not remove the bone entire, as it was in such a diseased condition. I then filled the cavity with lint, saturated with Monsel's solution of sub ferri; inserted two needles in the upper lip, and four others at different parts of the incisions, confined with interrupted suture. Whole length incisions, $5\frac{3}{4}$ inches. The hemorrhage was not troublesome.

Visit at 5 P. M. Had vomited several times. The first time the blood swallowed during the operation was ejected.

9 P. M. No more vomitting; pulse 87; gave morph. sulph., gr. ss.

16th, 6 A. M. Slept well; feels refreshed; no pain; pulse 86.

12 M. Pulse 88; some pain at points of insertion of needles; slight swelling; has taken beef-tea and port-wine every two hours.

8 P. M. Pulse 96; gave morph. sulph., gr. ss, and hyd. cum. creta, gr. 5; sight dim in right eye.

17th, 6 A. M. Pulse 87.

12 M. Pulse 88.

9 P. M. Pulse 85; gave acet. opi., gtts. 6; skin moist and cool; has taken beef-tea and port-wine as usual.

18th, 7 A. M. Pulse 79; slept well; ordered an enema of tepid water.

12 M. Action from bowels.

19th, 2 P M. Pulse 82; slight headache; removed lint from cavity, as it had become offensive.

9 P. M. Pulse 82; ordered McMunn's elixir opi., gtts. 15; sat up to-day.

20th, 8 A. M. Pulse 87; ate soft-boiled egg and panada for breakfast.

2 P. M. Pulse 85.

9 P. M. Pulse 86.

21st, 8 A. M. Pulse 84; removed needle at angle of incision, and second one from the mouth; diet increased; feels well.

22d, 7 P. M. Sat up nearly all day; feels better to-day than since the operation.

23d, 8 A. M. Removed last needle; the whole of the incisions have united well; facial expression returning rapidly sight to the eye. The deformity will be comparatively slight. Has experienced little or no pain; while before the operation there was constant pain and constant dropping into the mouth a fœtid acrid pus, very offensive.

I think now that the disease will be likely to return, as I judge its character to be a combination of fibro-plastic and encephaloid; but even if it does, the operation was justifiable, as the patient feels so inexpressibly relieved. Had she submitted to an operation three months earlier, perhaps it would not have been necessary to remove the entire bone.

My plan of incision, I think, gives an operator more room than any plan I have seen in authorities which I have examined.

The case, I think, is one of unusual interest, on account of age of patient, and other circumstances pertaining to the case, of which I have given an imperfect history.

Translations.

Historico-Physiological Disquisition on Punishment by the Guillotine.

Made to the Medico-Legal Society of Paris by MM. DUJARDIN-BEAUMETS and EVARD. From the *Annalles D'Hygiene.* Translated for the LANCET AND OBSERVER by ROBT. M. DENIG, M. D., Columbus, Ohio.

Contemporary writers, opposed to the death penalty, have endeavored recently to excite the public sympathy by especially directing their attacks against the mode of executing criminals in this country, representing, in the strongest manner possible, the guillotine as an instrument of extreme torture, and base their conclusions on the apparent judgment of physicians whose sincerity and distinction no one can dispute. The authors of "The Parliamentary History of the Republic of France," say on this subject: "The experience and observation of modern physiologists have demonstrated that the advantage claimed for the guillotine, that it causes no suffering, is an error." . . . "Strong energetic men, who perished as martyrs in a glorious cause nobly sustained, would be capable of *feeling* and *thinking* a long time after their heads had fallen into the fatal basket." "Ten minutes then would be an age." Very recently political journals have made a great noise over a letter written by a medical man, in which he boldly affirms that the head separated from the body thus, continues to feel and think for more than a *hour* after decapitation, and that real death would take place after *two* or *three* hours.

What more calculated to inspire with terror an incompetent and credulous public than such hardy affirmations? What more calculated to disturb the conscience of those on whom the law imposes the duty of judging criminals?

Public credulity seeks with avidity and accepts with favor these frightful histories. The head of Charlotte Corday blushing under the blow of the executioner, two heads biting each other in the basket, the bottom of the sack gnawed by the teeth of the victims, are traditional recitals which the distorted imagination accepts as real, without stopping to inquire as to their probability. The advocates for the abolishment of the death penalty find in these horrors a persuasive argument; for it addresses itself at once to that instinctive and profound sympathy which is felt by the most hardened for those who are about to suffer the extreme penalty of the law. Some of these journals have even exaggerated these unsupported assertions of our *confrerès.* "We hold," says one of them, "that it has been clearly demonstrated there exists no mode of punishment more cruel, more terrible than the guillotine." Of course, the sight of the apparatus, or any other, is calculated to strike with terror the criminal about to receive the reward for his crimes; but is the punishment by it more cruel than decapitation by the ax or sword? The execution of so many illustrious personages furnishes us historical proof of their uncertainty. It is more efficacious than hanging, which degenerates into a frightful asphyxia, more or less prolonged, except when laxation, as an exception, causes immediate death. It is more rapid than the *garrotte vil*, which acts with an appreciable slowness; and even death by shooting is, at times, not free from a lingering torture.

Demonstrations of these affirmations are abundant in the history of capital punishment, both in this and foreign countries. We are not concerned now with the question of the abolition of the death penalty; it is to the wisdom of the legislature that belongs the consideration of this high social problem. The law punishes with death those who have been found guilty of high crimes; they must be put to death, and all agree that it is not to be accomplished by hanging or shooting. Doubtless, chemistry has placed within our reach poisons capable of causing almost immediate and almost painless death; but our civilization does not permit our return to the practice of the Greeks and Romans in this respect, and who would be found advocating at present the passage of a law compelling the executioner to present the condemned a prisoner's cup, and constrain him to drink a beverage which would plunge him into everlasting oblivion?

It is quite certain that this instrument of death had already an existence before 1789, and we can not indorse the opinion in regard to it, expressed by M. Dubois, of Amiens, in his historical recollections of the last years of Louis and Vicq d'Azyr, published in 1856.

Our eminent *confrere* affirms, when speaking of this mode of punishment, that "the tradition of it is defective; that Guillotin had announced a simple desire of knowing how to substitute for the ax and sword used in decapitation a mode of execution, so that the condemned would not have to dread the slowness, uncertainty, and maladroitness of the executioner," and thinks that, with the exception of a rough draft known to exist in England only in an antiquated engraving, everything belongs to *Louis*, in this terrific engine, both of conception and construction. M. Dubois adds, that the translators of the *Actes des apotres* supposed that, in concert with Barnasbe and Chapelier, Guillotin had invented a *machine* adapted to the taking of life, in a manner quite agreeable—a machine, we may say, which has yet been conceived of.

It is very true that in publishing the motion made by Guillotin, on the 10th of October and the 1st of December, 1789, the *Monitor* has not thought proper to publish a single word of his long discourse made on the occasion. Guillotin reduced his motion to six propositions. The assembly deliberated only on the first, and the *Monitor* has not preserved the other five.

Guillotin had said : "With my machine, gentlemen, I will make your heads fly off with the twinkling of an eye, so quick that you won't feel any pain." The assembly was moved to laughter by the singular proposition, but in the meantime listened attentively to the remainder of the report.

The following is the second proposition : "In all cases in which the law inflicts the extreme penalty, the mode of punishment shall be the same, whatever may be the offense of the accused. The criminal shall be decapitated by means of a simple mechanism."

During this sitting the Abby Maury made a speech on the second article, and opposed decapitation on the grounds that the frequent sight of the effusion of blood would make the people barbarous and ferocious.

He was followed by Larjet, who held the same views. As it was four o'clock, the assembly was adjourned until next morning ; but the following day a quarrel between one of the ministers and a member of the assembly led to a violent tumult, which dissolved it, and the proposition of Guillotin, having no special political interest, was forgotten.

In the meantime public opinion was singularly excited by the proposition, and the *Monitor* of the 18th of December, 1789, awakening from its torpor or mutism, was indignant at finding the subject was being treated by some of the public journals with what it considered indecent levity. Every one is familiar with the song "*Acts des apotres*"—the acts of the apostles. The name *guillotine* was from that time appropriated to the proposed mechanism.

At first it had been called "*le coupe-tetes;* but this name did not prevail: it had been christened beyond recall after the name of its author, Guillotin, who was, according to contemporaneous testimony, a truly philanthropic and distinguished physician.

We find in the testimony of Louis himself a corroboration of the above, in Desgenettes' "Souvenirs of the Eighteenth Century:"

"Our legislature having resolved to continue the death penalty" (said Louis to Desgenettes, in April, 1792), "Dr. Guillotin proposed, as you know, decapitation by means of a machine long since known in Italy, and of which a model is still in existence in the Theatre of Audinot. When this instrument of punishment was adopted I was ordered, by a decree of the directory of the department of Paris, to superintend its construction, and make what experiments with it I might judge neeessary. The part which I have taken in the affair, and which I have always regarded as an act of humanity, is restricted to the formation of the blade or knife, making or setting it somewhat oblique, that it might more certainly and speedily accomplish the object in view. Owing to this circumstance, my enemies, aided by the influence of a licentious press, endeavored to give this fatal instrument the name *Pettite-Louison.* It had, however, too thoroughly been christened to substitute this for *guillotine*, by which it was everywhere known.

"I acknowledge to the weakness of having been excessively chagrined by this, as it seemed to me, atrocious proceeding, although some were disposed to regard it as a mere pleasantry, quite in good taste."

The testimony of Louis himself, in March, 1792, establishes the fact that an attempt had been made in England to effect decapitation by means of a machine acting on fixed principles. Louis, in demonstrating these principles, says that a similar machine might be constructed, the effect of which would be certain and instantaneous; but that an essential element was wanting in the instrument already known. Nothing seems to have escaped the sagacity of this eminent critic. The neck of the victim not being a fixed point, might, as in decapitation by the sword or ax, endeavor to escape the descending blow, and a renewal of those bloody dramas, formerly so frequently witnessed, and so contrary to the spirit and intention of the new law, be again seen. To remedy this defect Louis proposed to fix the neck of the condemned by means of a cross-bar, which, without causing any pain, would effectually restrain resistance, and insure the certainty of the mechanical proceeding, by which death would be reduced to the simple and immediate privation of life.

From this *exposé* we may be permitted to conclude that this instrument already existed, was well known, and that in proposing its adoption Guillotin was actuated by the purest principles of humanity.

The legislature wished to render capital punishment by decapitation rapid and certain; for this purpose the aid of surgery is invoked in accomplishing the solution of a problem, which, though repugnant to this beneficent art, had in the light of humanity and science an irresistible interest—that of annihilating in an instant and at once all physical pain and moral suffering, the victim passing without transition from time to eternity.

And who better than the distinguished surgeon, Louis, could judge of the effects of this now re-established engine of death, in accomplishing the end in view—instantaneous death? Thirty years' experience in the science of legal surgery, of which he was in reality the founder, and which alone would suffice for his glory, pointed at once to him as the proper choice of the legislative committee. Louis knew well the uncertainty and slowness of death by hanging. He had, more than any other person, studied the conditions of violent death; had practiced his art as a military surgeon in protracted campaigns; had the address, by his articles on the certain signs of death, to allay the fears excited by the tragic histories of premature interments. He had been thirty years professor of physiology, and could not be ignorant of the conditions in which death is real, immediate. Some surgeons insist on telling us that there are no proofs of this. We must avow that if such assertions are based on fact, we can not too much regret the part this distinguished surgeon has taken in perfecting the instrument of death we are considering, since the result would be diametrically opposed to that which his humane feelings prompted him to accomplish.

Happily we are not left in doubt in the matter. The physiology of our day confirms the opinion formed in '89, of the instantaneousness of death by mechanical decapitation.

We believe we have, on the 21st of January, 1871, acquired complete physiological proof that the decapitated can not for a moment retain a consciousness of his existence, and that the instant the knife passes between the heart and the brain all intelligence and physical suffering ceases.

To verify our conclusions and resolve the problem, we have had recently afforded us a favorable opportunity, in witnessing the execution and examining the cadaver of Belliere, who paid the penalty of a parricide, at Beauvais, in January last.

Doubtless, we should have recoiled from witnessing this tragic spectacle, had not the strange assertions with which recent political journals had endeavored to imbue the public mind, fixed our resolution and stimulated our desire to arrive at the truth.

It is important before making known the results of our observations, to state that we by no means confound the life of the organs with intelligence; the reflex or involuntary movements with those which the will governs; the vital properties inherent in the different tissues with the *moi*, the *ego*, which alone gives the knowledge of suffering. We set out with this incontestable fact, acknowledged by all physiologists, that the influence of the blood on the functions of the nervous system, is of the first order; and we hold it as demonstrated by experiment, that the mammifera whose brain no more receives blood is struck with immediate death.

Now, decapitation causes the immediate interruption of this primordial influence of the heart upon the brain. It is possible that the blood-wave, impelled by the action of the heart, continues its ascending march at the moment when the knife severs the arteries and veins of the neck; but is it quite certain that this current of blood, no more sustained by any *vis a tergo*, reaches the capillaries of the brain, and the gaping cervical trunks do not permit the reflux of the greater part?

If this is so, the brain ceases to receive the quantity of blood which ought normally to reach it from one pulsation to another, and syncopy is imminent. The ascending wave, interrupted in its progress, is not followed by another flux. In the interval from one pulsation to another—in a second—syncopy is complete, definite, and consequently fatal.

Any one who has suffered from prolonged fainting or syncopy, has experienced in his own feelings the simultaneous cessation of all his sensations and faculties—an oblivion so complete that, at the return of his consciousness, he realizes that the moments passed in this state are forever blotted from his intellectual existence.*

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* This theory of syncopy is universally admitted; it is that of Cabanis and of Tassus. Already in the seventeenth century, Wepfer, as quoted by Tassus, says: "The punishment of decapitation proves evidently how much the brain is dependent on the heart's continued action; for as soon as the head is separated from the body, all feeling and all movement die, even in the head."

It is possible, nay, even probable, that if, as M. Brown-Sequard has practiced on inferior animals, we injected oxygenated blood into the cranial vessels of the decapitated victim, a vague impression of consciousness might momentarily be restored to the brain. But so far from being revivified by artificial injection, the head of the decapitated loses, in a few moments, the little blood still remaining in it, and the brain, deprived of its indispensable excitant, passes, without transition or alternation, from suspension to complete annihilation of all the faculties.*

The opening of the cranium of the criminal who was executed at Beauvais, furnished the anatomical proof of this syncopy. If we grant to physiology that syncopy is the constant result of the diminution or cessation of the afflux of blood to the brain; if we admit that syncopy interrupts the functions of the senses and intelligence, and that it ceases only where the brain is again stimulated by a reflux of blood of sufficient intensity, we may well admit also as proved, that the brain of the decapitated is in a state of syncopy so imminent that there would be neither ideas nor sensations, consequently nothing to give expression to.

We know, also, that in cases where a person is wounded, the pain caused by the blow is in inverse ratio to the rapidity of the force causing it.

There is no necessity, then, in order to explain the annihilation of the cerebral faculties, to invoke the aid of shock or commotion, which a similar *traumatism* or injury ought to produce inevitably in the entire nervous system. However sharp may be the edge of the knife, however rapid its oblique cutting motion, it has nevertheless that of a die or mass in motion also, as well as a cutting instrument.

M. Maxime du Camp, from whom we borrow these appropriate expressions, establishes the fact that the descending blade, with its *annexæ*, has a momentum of nearly six hundred pounds. We should not then be surprised to find "the head leap from the shoulders into the basket."

The parricide Belliere, aged 33 years, of more than ordinary vigor bestial and violent almost to ferocity, learned without apparent fright that his last hour had come; then burst forth in expressions of rage and reviling at the judges: but offered no resistance to the necessary arrangement of his toilet for the execution.

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* We were at first tempted to make this mysterious and interesting experiment, but the shortness of time did not permit improving the material preparations necessary to carry it into successful application. It is doubtful, moreover, whether the simple dictates of humanity would not discountenance our experiment, which would be rather a psycological curiosity than one of scientific value.

The pulse, on examination, did not exceed its customary frequency—64. During the first half of the passage from the prison to the scaffold, no change was observable in his countenance, which retained its color and tranquillity. At the moment, however, of coming within sight of the instrument of death, a sudden paleness passed over his visage. In making the remainder of the distance, he seemed altogether unconscious of the movements of the vehicle which transported him.

He descended from the carriage without assistance; heard his death-warrant read; embraced several times the priest who attended him; mounted with a firm step the platform, without any assistance: the assistant then drew his head strongly forward in the *lunette*, and at 58 minutes past 7 o'clock a heavy *thud* announced that justice was satisfied. The blood flowed freely from the neck, bespattering the sides of the flue which conducted the head to a box beneath the scaffold. At 3 minutes past 8 o'clock the remains of the victim were placed at our disposal. The head was immediately placed upon a table, covered with a compress to collect the blood which might escape during our operations.

The face was bloodless, of a uniform pale yellow hue; the lower jaw fallen, the mouth open; the immobile visage had the appearance of stupor, but not of suffering; the eye wide open with a fixed stare, the pupils dilated, the cornea already commencing to lose its polish and transparency. A little sawdust adhered here and there to the skin on the face and to each cornea; there was no trace of it on the interior of the lips or on the tongue. The section of the skin was very clean and smooth; its retraction described an oval ring, through which were seen to some extent the muscles of the neck, the first rings of the tracheal cartilages, and the thyroid cartilage. From the trachea was suspended some glairy mucus. The œsophagus was slightly retracted. The surface of the wound was covered with a mixture of sawdust and blood, of a very brilliant sanguinolent color; on the sawdust in the corner of the basket, where the head reposed, there was scarcely any blood; on the contrary, the sawdust in the box where the head fell when released from the hands of the assistant, was deeply impregnated with blood. A vapor rendered appreciable by the lowering temperature, exhaled from the cut surface. We removed the sawdust and blood from the external ear; we approached as near to the ear as possible, and called three times with a loud voice the name of the victim: no movement, absolutely none, is seen in the eye or muscles of the face.

A sponge dipped in strong ammonia was held beneath the nares: no contraction of the *atar nasi* nor contortion of the face. We touched the lips with the sponge, no response. We pinched strongly the lips of the face several times without producing the slightest contraction

The conjunctiva of each eye was strongly and several times cauterized with nitrate of silver; a lighted candle was held at a short distance from the eye: no contraction of the lids or response from the pupils was elicited, the pupils remaining permanently dilated.

The organs of sense made no response to our appeals to them, either through their functions or physical sensibility.

All this might be because our interrogations had not been sufficiently "*savante.*"

All our appeals to the organ of perception failed to produce any evidence of consciousness; even a candle approached to within two centimetres of the eyeball produced no contraction, which, had it even occurred, would by every one have been attributed to involuntary and reflex action. Why, when appeal has thus been made to the pain produced by cauterization of the conjunctiva, the mucous surface of the lips, has the brain made no response by the winking of the eyelids, etc., that is to say, by reflex or instinctive muscular contraction? Why have the muscles of the face maintained their stupid expression, if it is not because instinct, intelligence, and will were already dead?

We then excited the different parts of the nervous system by galvanism with the anticipated results, producing closure of the eyelids, gnashing of the teeth, and throwing the face into various contortions. Did the brain then perceive the feeling of pain which the expression of the face indicated by the various muscular contractions?

We can not think so, for two reasons: first, because when the current was applied to the left side, the right remained entirely passive, whilst the former was violently contorted; and second, because the parts electrified, immediately resumed their previous quiet state as soon as the stimulant was resumed. During the first part of these experiments the continuity of the excited nerves with the brain still existed, and we might hence be inclined to believe that the brain remaining intact could still feel and think, but could not give expression to the thought or feeling, when thus on the very verge of death or eternal sleep. We have just said that certain movements excited by the electric current had the characteristic expression of suffering. We then incised the integuments of the cranium from the nucha to the root of the nose; we exposed the cranial surface as far as the zygomatic arch. We then cut the nerve filaments, the section of which is ordinarily so painful. The muscles of the neck and temporal muscles retracted vigorously under the edge of the knife, showing they still had organic life; but not a movement, not even the slightest reflex contraction, is seen in the face.

The decollation had now been performed three-quarters of an hour. We sawed the cranium through and extracted the brain. The muscles of the face and those of the maxillæ responded to the stimulus of the electric current the same as when the brain and nerves were *intact*.

The integument was now growing cold, and yet we obtained from a strong current active contractions an hour and a half after the brain had been extracted. We think it will be conceded now without difficulty, that the brain had ceased to think and feel. Nevertheless the muscles continued to speak the same language; and we find in the same the proof, as we are about to see, that it was as mute at the moment of decapitation as at the end of our experiments. The dura mater, of a bluish white tint, being incised in the ordinary manner, the pia mater was to a large extent uncovered. We then observed, first, there is no liquid in the large arachnoid cavity; second, the vessels of the pia mater, almost bloodless, were distended throughout the greater part of the superior surface of the hemispheres with an aeriform fluid. We can, by slightly gliding the handle of scalpel over the surface of the pia mater, put this aeriform fluid in motion, and cause it to pass into capillary vessels it had not yet entered; at several points it was divided into little bubbles by the clear rose-colored blood contained in the vessels. These bubbles could be put into motion by the same mechanism.

We also found that the cavernous and lateral sinuses, distended with the same fluid, were, as well as the fossa of the jugular vein, absolutely exsanguine.

The brain, on slicing the right hemisphere horizontally, and the left vertically, presents only a few bloody points, clear and rosy, rendered more appreciable by compressing the organ ; the choroid plexus contained a little rose-colored blood ; in the ventricles we found scarcely a teaspoonful of citrine-colored serum.

These cadaveric proofs, which establish the relative emptiness of the blood-vessels of the brain ; the absolute emptiness, so to speak, of the network of vessels in the pia mater ; also the complete emptiness of the sinuses at the bottom of the brain—are in formal opposition to what has been written and published lately.

Those of us who have found air in the sinuses and vessel of the pia mater, are slow to believe (as has been asserted) that the pressure of the atmosphere retains the blood in the brain and thus keeps up its nutrition. Doubtless, the cerebral mass is in itself intact—healthy, as regards its matter, at the moment of decollation; but its organism, its functions, that is to say, the matter in motion, can they be healthy, intact, when the circulation is so profoundly disturbed, and can there be nutrition without blood supply? No person doubts the instantaneousness of death from pulmonary embolism, rupture of the heart, or thoracic aneurism ; no one doubts that lightning can cause instant death. In all these cases, the cephalo-spinal fluid, the spinal narrow, and brain remain intact, and nevertheless death of intelligence is according to all observations immediate.

We think, then, that neither normal nor pathological physiology can justify the views and conclusions of the publications to which we have made reference ; and we think ourselves right in believing that death from capitation is also immediate, because the moment the head is separated from the trunk the escape of blood is as complete as possible : hence profound syncopy and entire abrogation of the functions of the brain.

Our investigations also extended to the thorax. The pectoral muscles contracted vigorously under the knife which incised them, and the diaphragm quickly descended when the thorax was opened.

The heart, which appeared enlarged, was seen pulsating through the pericardium. The lungs were collapsed and of a blackish-gray color.

The pericardium being opened, it was easy to recognize the enormously distended right auricle, of which the free edge rose up at each succeeding contraction, which occurred every two or three seconds.

The right ventricle, which covered entirely the left heart, was dilated, rounded, tense, and contracted slowly and feebly once to every five or six of the auricle.

The left heart, the auricle of which was remarkably small, especially when compared with the right, was hard and retracted. Palpation of the heart showed that both auricle and ventricle were filled, not with blood, but with an aeriform fluid.

A sustained pressure diminished these cavities three-fourths in size. The contractions of the auricle persisted, those of the ventricle becoming more rare, and in a quarter of an hour the auricle and ventricle were again distended as formerly. It seemed to us that the air came from the empty and dilated vena cava, as well as the trunks of the trachio-cevalic veins. All the usual reactions and responses from the application of galvanism were obtained during the entire ten hours allotted to our examination.

We concluded, then, that the frightful stories alluded to in the beginning of this article could have their origin only in a disturbed fancy, or in a wicked and reprehensible desire to excite in the minds of their credulous readers a morbid and misplaced sympathy, to be used for base political purposes.

Various Theories.—After the meeting of the American Association for the Advancement of Science, "Section 2" went in for a little fun. One member, remarking on the frequency with which naturalists were mistaken in their first impressions, approached the blackboard and drew a fragment of bone, which, he said, a friend, a naturalist, had reconstructed an animal from. The reconstruction was effected on the blackboard, and something like a terrific tomcat was the result. Meanwhile, he described the bones and parts as he added them, drawing and speaking at the same moment. Then he suggested certain anatomical objections and possible improvements, which produced an amusing change in the figure. Finally, he said, they concluded to restore the fragments on a different hypothesis. The fragment was drawn again, and in an instant a few strokes drawn additionally revealed its true character. It was the handle of a jug.

There is a wise lesson in that joke.

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE.

J. H. TATE, M. D., PRES'T. J. W. HADLOCK, M. D., SEC'Y.

October 25, 1873.

The President announced that a continuance of the discussion on chloroform was the special order for the evening.

Dr. M. B. Wright remarked that he would say a few words merely to bring up some points to start the discussion. He said, what have we learned in regard to the use of chloroform? What are the precautions necessary during its exhibition, and what is its effect? When introduced, apoplexy, consumption, lung and heart trouble were regarded as contra-indicating its use. These views were afterward discarded. Then, that administered in too concentrated form it was thought dangerous. Ether and chloroform in combination had been employed. The ether was the more relaxing. The first death in Cincinnati was attributed to the use of an impure article. Sir J. Simpson had told the speaker years ago, that chloroform had been exhibited in thousands of cases in Edinburgh without accident. A short time afterward he had a fatal case. Shall it be given slowly or rapidly, and are there discoverable conditions which contra-indicate its use? These are questions of importance to decide. Persons in feeble health often bear it better than the robust. Does the heart or lungs cease acting first? He had seen two fatal cases. One during the performance of Pirogoff's operation—the heart suddenly stopped. Does electricity do good in these cases? The speaker said he had lived through three periods in which electricity had been the fashion, and the present he thought would soon end. He had seen it used in post-partum hemorrhage and without effect. Has it ever been effective?

Dr. Ludlow said he was not in a talking mood, and that he only arose to say that electricity applied to the phrenic nerve in these cases would do good, but if applied to the pneumogastric, its effects would be to still further interrupt the action of the heart. That a Dr. Cooper, in some hospital in London, the name of which escaped him, had employed electricity in *five hundred* (500) cases, in which the patient was apparently dying from chloroform, and in all he had been successful. He applied one pole to the neck, and the other in the fifth, sixth, or seventh intercostal space—producing muscular contraction by removing one of the poles from time to time.

Dr. Muscroft. Where the lungs were at fault, electricity might be of service. There had lately come to his knowledge a fact about chloroform which was new to him—that Dr. J. Bell had used it as an anæsthetic nine months before Simpson, and continued its use up to the time of its introduction by the latter. The effect of chloroform on a diseased heart had been illustrated in a case of calculus which the doctor had been lately called to operate on. The symptoms of stone were of fifteen years' standing, beginning at the age of two. There was also present mitral and aortic insufficiency, with hypertrophy of left ventricle. On consultation, Dr. Graham decided that the heart-trouble did not contra-indicate the chloroform. Ether and chloroform were at first given, and afterward pure chloroform, and no bad effects were observed, so that now the doctor thought that every surgical case was a case for the use of chloroform. He thinks that the cause of death is often from a change produced in the blood by the chloroform, and likens it to the effect of some poisonous gases. If an animal is starved for one or two weeks he may still exhibit some vigor, but even after he is again well fed, and apparently has returned to good health, he often dies suddenly. This is from the altered condition of the blood.

Dr. N. P. Dandridge. The cessation of the action of the heart does not contra-indicate the use of electricity. Sansom records a case in which it was used after the heart had ceased beating, and the patient recovered. In using it, one pole should be applied over the point where the omo-hyoid muscle crosses the phrenic nerve, and the other in the seventh intercostal space. Whether the pneumogastric would be excited at the same time was uncertain, as the nerves at this point were so close together that the pole would be brought into intimate contact with both nerves. The object of electricity was to excite respiratory movements, and thus furnish the heart the stimulus of aerated blood—the only stimulus which proves at all efficacious in producing continued contractions. Expiration empties the lungs of any remaining gas, and must at the same times develop some movement in the pulmonary circulation. Electricity was only of benefit as a means of assisting artificial respiration, and had only so been used in the case in point; but as proved by the case of Sansom above quoted, its use was not contra-indicated when the heart had stopped.

Dr. M. B. Wright was more uncertain than ever. Some die from small quantity, some from large. Dr. Muscroft's idea, of death being due to the condition of the blood, was new to him. This theory he could not reconcile to the doctor's practice of using electricity in threatening cases. Dr. Ludlow said that five hundred cases of apparent death had occurred in one hospital. Such a number occurring in one hospital, and under one surgeon, he regarded as impossible. Dr. Wright wants to know how to make chloroform safe, and if electricity can be depended on to obviate threatened death.

Dr. Muscroft said that Dr. Wright had misunderstood him. He said that when the lungs were at fault, electricty might do good; that some changed condition of the blood might account for death in many cases. This view had nothing to do with the use of electricity.

Dr. Carson alluded to the experiments of Alfred, in which liq. ammonia was introduced into the veins in case of snake-bites—ʒss. to ʒi. was used. He suggests the propriety of trying it in chloroform cases, and thinks if the pulse has ceased, that it might be thrown into the jugular vein, and thus made to reach the heart.

Dr. Wright would like to know how it could reach the heart if there was no circulation.

Dr. Carson. In some cases the circulation might not be completely at a stand-still. The injection should be into the jugular, and as near the heart as possible.

Dr. Tate asked Dr. Kemper to take the chair, and then said, nearly all fatal cases are when but a small amount of chloroform had been given. Before anæsthesia was complete, he thought there was an increased irritability in the nervous system. At this time the peripheral irritation of the surgeon's knife was carried to the nervous centers, and thence by reflex action caused irritation of the pneumogastric, and thus paralyzed the action of the heart. He referred to Sir A. Cooper's case, where death occurred suddenly from lancing an abscess. In fatal cases from chloroform, he thinks the anæsthesia is not profound enough, and the nerve centers not protected from this increased irritability. In regard to attempts at resuscitation in cases of apparent death, he referred to the case of new-born children. Here, although the heart may not act, well-directed efforts often saved them.

Dr. N. P. Dandridge. The discussion this evening has turned almost entirely on the use of electricity, so that it might be supposed that this was the only means used in the case reported. This was not true; it had only been used as an aid to artificial respiration, and was not long continued: but other means, such as alternately compressing and expanding the chest to imitate the natural movements in respiration, lowering the head, drawing out the tongue, etc., were persevered in for forty-five minutes.

Dr. Ludlow reported favorably to Dr. Macallister for admission to membership of the Academy. The Academy went into the election; he was unanimously elected Member of Academy.

Academy adjourned.

November 1, 1873.

Dr. Holdt referred to remarks made during the discussion on the *mode of action* of chloroform, viz., "that death commenced at the heart or at the lungs," and thought these expressions lacked scientific accuracy. Death does not occur from the effect of chloroform on the lungs or heart directly. It first enters the circulation, and makes its impression on the nerves that preside over the cardiac and respiratory functions. He did not think that electricity applied to the neck, as recommended, would be likely to be beneficial; but applied directly to the heart, in the form of electro-puncture, he thought it more likely to do good. He did not think in most of these cases that death was immediate and absolute, but that there remained a feeble action of the heart, imperceptible perhaps, and that anything that would increase this action or keep it up, might prevent the blood from coagulating, and keep it in motion till the chloroform was eliminated. Electro-puncture of the heart he thought might have this effect.

Dr. Juler said he could not agree fully with the last speaker. He thought excitation of the heart, by electro-puncture, might exhaust the little remaining excitability of the organ, and arrest its action, upon the general principle that excitement is followed by exhaustion.

Dr. Kemper raised the question whether chloroform prevents the shock of an operation. May not the system sustain the shock, although the subject may be unable to make expression of it? He illustrated his views by cases of sudden death during strong excitement, during battle, etc. Thinks, with Dr. Holdt, that death is not generally instantaneous, and that in cases of resuscitation, the action of the heart had not entirely ceased. Had never known of a case of resuscitation in an adult or a new-born infant after the action of the heart had ceased.

Dr. Tate thought there was a difficulty, in the application of electricity, in confining it to a particular part or organ, and doubted whether it could be applied to the ganglia of the heart without affecting other parts. The most important thing is to keep up respiration; thought the heart was affected secondarily. Referred to experiments where ether and methylene had produced paralysis of the muscles of respiration. Thought no case had been shown where the action of the heart was first arrested. Thought the action of the heart may be restored after it has ceased, and referred to a case where the child in utero was restored five hours after the mother's death.

Dr. Reamy called attention to a paper read before the Ohio State Medical Society, by Dr. Culbertson, on the subject under discussion, which he regarded as more valuable than anything he had seen. It was based on a large number of experiments, and threw light on many of the points in this discussion. Dr. Reamy also related some experiments on rats with chloroform, showing how difficult it is to kill them, and their recovery after apparent death.

Dr. Kemper related some experiments on cats with chloroform.

Dr. Tate reported the case of a man gored in the abdomen by an ox. The horn was thrust under the integument, and passing up some inches, passed through the peritoneum into the cavity. Apprehending difficulty in retaining the bowel, he cut down over the internal or peritoneal opening, drew together the peritoneum with three silver sutures, and then closed the external wound with sutures. The case recovered without any further trouble. He was led to close the peritoneum for fear of hernial protrusion and strangulation. Related a case of wound of abdomen near umbilicus, in which he reduced the intestine and closed the external wound. Eight days afterward saw the case, which had all the symptoms of strangulated hernia. The tumor was opened, and revealed a loop of strangulated intestines in a state of mortification. The patient died. Ovariotomists include the peritoneum in the stitches without injury.

Dr. Juler asked why he departed from the surgical rule in such cases, by stitching the peritoneum. He did not think the condition of the peritoneum the same in ovarian disease; probably it was less disposed to inflammation from incisions and sutures than in the normal condition.

Dr. Holdt reported a case in which a man had a single attack of gout, from which he entirely recovered. Some time afterward while quietly sitting with his family he became suddenly speechless, without paralysis or disturbance of intellect. He could write answers correctly. He has now been affected four days; there is gradual improvement of speech, but he is sleepless. The man's habits were good, except that he had been an excessive smoker for fifty years. The aphasia was probably produced by embolism of the cerebral vessels, caused by the gouty diathesis.

Dr. Carson said he had seen this case of Dr. Holdt's, and agreed with him in the opinion that the aphasia was due to plugging of a small cerebral artery, probably situated in the third left frontal convolution, the usual location. He also related the case of a boy ten or eleven years old, who became aphasic after a fracas, in which he said he had been struck on the head. There were no marks of violence, and he doubted whether he had been struck. In four or five days his speech suddenly returned. He was inclined to believe that the symptoms depended upon fright and nervousness.

Dr. Muscroft reported from the committee in reference to the protective association for medical men, and read the constitution and by-laws. The report was accepted, and made the order for the next meeting.

Dr. R. B. Davy was unanimously elected a member of the Academy.

OHIO STATE MEDICAL SOCIETY.

We have before us the Transactions of the Twenty-eight Annual Meeting of the Ohio State Medical Society, 1873; Dr. A. B. Jones, Portsmouth, president, and Dr. W. J. Conklin, secretary.

The meeting was a success. The reports are full and abundant.

Prof. H. J. Herrick, of Cleveland, was chosen as the next president, and the city of Toledo the place of next meeting, on the first Tuesday in June, 1874.

Of the papers presented, first in order we have the address of the retiring president, Dr. A. B. Jones, who speaks of unworthy persons that find their way into the ranks of the medical profession and the success of such. To prevent this he would have the community at large educated, and this through the *Press*, through our daily newspapers, by a medical writer, and "thinks that a column of a single popular daily paper could do more good than all the medical journals combined." This we think rather a Quixotic idea, and would venture the remark, that it would not be read by one-tenth part of the readers of the press. We heartily agree with him, that "a law forbidding the sale of any patent nostrium," without first having a true formula of the contents of the box or bottle printed in English, and pasted on the outside, and making it a fraud not to comply with it," would have a tendency to diminish the sale of such worthless trash. He pays a golden tribute to our "Medical Journals," which is as it should be. The author next refers to the reports that are usually presented for the consideration of the society, and thinks, "that instead of quoting authors at length, much time might be saved by referring the members to book and page."

After this comes the denunciation of "tasteless and palatable medicines and elixirs," and is very severe on those that claim to have quite a variety of medicines combined. In this connection "specialists" are mentioned. He considers them a necessity, and "commends them to the special vigilance of the general practitioner."

The next paper is a "Report on a State Board of Health," by Dr. J. R. Black, of Newark.

This is a well-written paper, and we will make a few short extracts. The author speaks of the way in which England is divided into sanitary districts, and says: "The necessity for sanitary legislation is sufficiently obvious—the protection of a community from causes of diseases, public in their nature, or the protection of every member of community against sanitary evils, which he, as an individual, is powerless in doing for himself." Again, in speaking of the manner in which people can travel on our public thoroughfares with a "contagious disease," and spread the seeds of disease and death along the route: "The remedy for such evils as these is not in a state board of health, but in educating the public mind on this subject, so that it may perceive the necessity and the benefit which enlightened sanitary legislation is capable of conferring." In closing he pays a tribute to the "medical profession in the great duty of trying to save men and women from the grasp of disease, even at the risk of striking at their pecuniary success."

Next in order we have a paper on "First Phases of Living Forms," by J. B. Hough, M. D., Professor Chemistry Miami Medical College. To the student this will prove a valuable contribution, and will show what changes may take place "from higher organisms into lower, and changes from lower organisms into higher."

The next paper is "Therapeutics of Alcohol," by Dr. E. H. Hyatt, of Delaware. The author in his paper early tells us "that the classification of alcohol as a stimulant is a mistake." "It is not a stimulant proper; it is narcotic." He claims that its action is as well marked as opium, with the same general symptoms on the nervous system; and, "I may add further, that even the primary acceleration of the pulse and the enlivening of the mental faculties, which are witnessed in the use of either alcohol or opium, are not due to their stimulating action, but are to be attributed to the narcotic effect upon the nerve-centers as an irritant poison and the vital reaction which follows." The author closes with the following recapitulation: "Negatively considered: 1. Alcohol is not a stimulant proper; 2. It does not increase nervous force nor excite vital action; 3. It does not increase the temperature of the body, or, in other words, is not a heat-producing agent; 4. It is not in any sense a food; can not be assimilated." "Affirmatively: 1. Alcohol is a narcotico-irritant poison; 2. It is antagonistic to health and life; 3. It weakens and thins the blood; 4. It diminishes the caloric of the human body; 5. It represses nervous force and lessens muscular power; 6. It impairs the mind, and weakens and prevents all the intellectual functions; 7. It kills precisely in the same way that opium does."

"The Treatment of Chronic Nasal Catarrh," by Dr. Jas. L. Whittaker, of Cincinnati, is the next paper. The author thinks that the "nasal douche is a failure, but is an excellent means of cleansing the cavities," and "the only solutions which should ever be used are of salt, or of phosphate of soda or ammonia." He also holds the same views in regard to "spray-producers for the posterior nares or the nasal passages themselves." "Beyond their cleansing action they are mere playthings." In this connection, we have just laid on our table a short paper on the "Cavities of the Nose, Thoat, and Ear," with treatment, etc., by Dr. Thos. F. Rumbold, of St. Louis, Mo. Dr. Rumbold claims that the "spray-producer is indispensable for the proper treatment of these passages," and has them made of different sizes, and bent to suit any cavity or part of the body. Dr. Whittaker relies on the method by "compression," and places great stress on the manner of using the different-sized tubes or bougies, but tells us "he first cleanses the part well, and then coats the point of his tube or bougie with a thick coating of an ointment of cold cream and tannic acid." We are disposed to think that the beneficial results obtained, are as much due to the cleansing of the cavities and the tannic acid applied as to the compression; for we have treated cases that got well when the disease had continued for some years, by the use of a solution of carbolic acid and water, and one case where the odor was so offensive as to exclude the patient from going to his church or visiting his neighbors. Dr. Rumbold also uses the carbolic acid with glycerine and water, with beneficial results. The treatment by the use of compression can not always be attended to, unless in the hospital or dispensary; while the spray-producer can be used by the patient or his friends: and we think the latter will be the most popular method of treatment, and the one that will meet with the most favor with the busy practitioner.

"Treatment of Cataract," by Dr. W. W. Seeley, of Cincinnati, is our next paper. To the general practitioner this is a very good paper, but to the oculist, nothing new has been advanced; and the paper, in the main, gives the results of the manner of the author's way of operating and results, and considers "the chief danger to the eye is iritis." The author operates by the so-called Graefe's method. The paper closes with a protest "against the practice of confining eye-patients in the dark, as cataract patients have their eyes bandaged; but during the examination, care should be taken to exclude the light."

Next in order we have "Caseous Pneumonia in its Relationship to Tuberculosis," by A. T. Keyt, M. D. The author of this tells us he has chosen to follow chiefly Rindfleish "as the exponent of the new pathology," and we find he has quoted largely from his text-book. The paper is too long to give a summary of it, as it takes up some twenty pages of the Transactions, and a few short extracts would not do the author justice. The paper closes as follows: "A correct pathology is at the foundation of a correct treatment; and may we not hope that study and investigation of the subject will yet result in such discovery and settlement of truth as will insure the grand consummation—when phthisis, so long the opprobrium, shall come to signalize in its prevention and cure the triumphs of medicine?"

The next paper is "Ophthalmology," by J. H. Buckner, M. D. In this paper, as the author tells us, we have "what is mainly an abstract of notes taken during a recent visit to some of the principal eye-clinics of Europe." Without enumerating all the subjects treated of, we will merely mention that he considers the operation of Dr. Liebreich for cataract as far superior to that of Prof. Graefe's, as performed by Liebreich, "but that the latter operation was not generally adopted in Europe by eye-surgeons."

We next have quite a lengthy paper on "Dipsomania and Drunkenness," by D. A. Morse, M. D. This paper is too long to attempt any synopsis, or even to give your readers an idea of it without exceeding the limits of this article. The author closes with the following:

"1. That there is a dipsomania.

"2. That the condition is a *physical one.*

"3. That the symptoms are unvarying; that all authors agree in their description of them; and that authors use nearly the identical language in describing the conditions that were used from 1817 to 1825, when the disease was first pointed out.

"4. That the law makes no distinction between the relation of the dipsomaniac and the common drunkard to full legal responsibility."

"Cases of Disease of the Nervous System, with Commentary," by Prof. Roberts Bartholow, is next in order. The author tells us "that the cases offered in his paper are those that occurred in his practice, with a commentary on some of their most salient points." We have aphasia divided into—

1. "Amnesic Aphasia," with case.
2. "Paralytic Aphasia," with case.
3. "Ataxic Aphasia," with case.

The author then treats of "Syphilitic Affections of the Nervous System," viz: "Syphilitic Hemiplegia," with case; "Syphilitic Brain Tumor," with case; "Syphilitic Cerebro-Spinal Disease simulating Progressive Locomotor Ataxia," with case; "Syphilitic Paraplegia," with case; "Progressive Muscular Atrophy," with case. The commentary on each of the reported cases are full of interest to those engaged in the study of the diseases of the nervous system, and from the well-known ability of the author they will prove a valuable contribution to the medical practitioner.

The next paper is by Dr. Geo. E. Walton, on "Therapeutics of Mineral Springs." The author's letter to the Publication Committee will give an idea of the contents, and is as follows:

"In sending you my report on 'Therapeutics of Mineral Springs,' which was referred to you, it may be well to say that it is a concise statement of conclusions given in my recent work on 'Mineral Springs of the United States and Canada,' in some instances the same words being used."

"Sulphate of Quinia," by Dr. S. S. Gray, of Piqua, is the last paper of the Transactions.

In this paper the author advocates the plan of giving large doses at long intervals rather than small doses at short intervals, and reports several cases to prove his theory, and closes with the following summary:

"1. That the effects of quinine may be very much assisted by the use of warm drinks, warm foot-baths, and keeping our patient warm in bed.

"2. That the beneficial effects of quinine are more certainly obtained by large doses at long intervals than by small doses at short intervals.

"3. That it is strongly indicated in cases of debility and most cases of delicate females.

"4. That it is not contra-indicated in many cases of pain in the head, but often relieves.

"5. That in croup we may expect great benefit, and it will often supersede the necessity of any other mode of treatment.

"6. That we may give it in the first stages of pneumonia with as much hope of success as in an ordinary intermittent.

"7. That it may be given in the inflammatory stage of pneumonia, if combined with *veratrum viride*, with benefit."

The volume closes with a list of members with P. O., which is valuable as a reference.

W. S. C.

CLARKE COUNTY MEDICAL SOCIETY.

Reported by Dr. ISAAC KAY.

The Clarke County Medical Society met at the usual hour on Thursday, November 13th, Dr. W. G. Bryant, Vice-President, in the chair. Members present—Drs. Banwell, Bryant, D'Richey, Hazzard, Kay, Owen, Pollock, Reeves, Rice, J. H. Rodgers, Senseman, and Whitehead. Visitors—Drs. Casper, Smith, and Stevens.

Dr. Owen arose and called the attention of the society to the sad event of Dr. Andrew Bruce's death. Dr. O. made substantially the following remarks:

Mr. President, and Gentlemen of the Clarke County Medical Society:—At a called meeting of your society I had the honor of being selected by your honorable body to deliver a short address at our next regular monthly meeting, occasioned by the death of our much esteemed friend and brother, Andrew Bruce, A. M., M. D., ex-president of this society. I the more readily and cheerfully accept this painful and yet pleasant duty of doing honor to the distinguished dead, not only by reason of the friendly relations existing between the deceased and myself, but by reason of the very high estimation in which he was universally held by his professional brethren.

This year has been rendered memorable to our society in consequence of the demise of two of our number. The first—a young man, in the prime of life, just entering on a most successful career of professional life, and who promised to be an ornament of his chosen profession, and a bright and shining light among us; but alas! in the midst of the most flattering prospects, he was suddenly cut down and has gone to that undiscovered country from whose bourne no traveler ever returns—the lamented Dr. Rector. And now again another has fallen from the senior ranks of our profession, Dr. Andrew Bruce, who was respected, esteemed, and beloved by all, in consequence of his many manly, professional, moral, and Christian virtues, which clustered in his useful life in a most preeminent degree. As a man, he was dignified, social, and respectable, and of most uncompromising probity, exhibiting that great truth that "an honest man is truly the noblest work of God." As a friend he was reliable, strong, and unwavering, constant in his attachments. As a physician he was a high-toned medical gentleman, never condescending to anything little, low, or unprofessional for the sake of business, in counsel or otherwise, but was a strict observer of medical etiquette, doing always to others as he would have them do unto him. He was clear in his perceptions of disease, hence an excellent diagnoser.

He seemed with ease to grasp the pathological condition of his patients. As a therapeutist he was eminently successful, always applying his remedies with judgment and skill, evincing how clear were his pathological views, and also a very intimate acquaintance with therapeutics, and in every department of medical literature he had quite a thorough acquaintance, and consequently made a very eminent practitioner of medicine.

He was industrious and laborious, sparing no pains, time, or expense when the interests of his patients were concerned. As a moral man he had no superiors and few compeers.

As a Christian, he was conscientious and devoted to his Christian duties, unswerving in his integrity, and suffered nothing to turn him aside from what he conceived to be the path of duty. Thus a great and good man has fallen among us. Let us, my brethren of our noble profession, emulate his example and his many high Christian virtues, and let charity prompt us to throw a veil over his foibles whatever they may have been (for all men have them), that when we in our turn are called to obey the Divine behest to go into the spirit-land, we may as safely fall and as peacefully pass away as our beloved brother.

Andrew Bruce, M. D., was the son of Dr. Andrew Bruce, Sr. He was born in Somerset county, Pennsylvania, March 23, A. D. 1817. He attended the Washington College, at Washington, Penn., and graduated with honor at that institution, October 3, A. D. 1836. He studied medicine under the tutelage of his father for two years and then went to Philadelphia and became the student of that world-renowned physician, writer, and lecturer, Prof. Robley Dunglison.

On the 16th of March, 1840, he received the degree of Doctor of Medicine from the Jefferson Medical College of Philadelphia. He spent one year in the office of his preceptor (Prof. Dunglison), including the course of lectures, and attended as visiting physician the wards of the Philadelphia Hospital. He also attended a private course of instruction in the Philadelphia Hospital for lying-in women, under the instruction of Dr. Joseph Warrington. At the close of the year he received an appointment of physician and surgeon to the Mount Savage Iron Company Works at Mount Savage. On leaving the office of Prof. Dunglison for his appointed field of labor he received the following letter of recommendation, which I read. [Here Dr. Owen read a number of letters.] He remained in Mount Savage in the employ of the company for seven years, all this time doing a large business and performing many severe surgical operations. In 1847, through the failure of the company and the entire abandonment of the works, he left Mount Savage, and a few letters which I now read to you, are a fair criterion of the estimation in which he was held by his friends and patrons. On December 31, 1841, he was married to Miss Catharine Armstrong, who now survives him. After the failure of the company he returned to Somerset, Pennsylvania, where he engaged in the practice of his profession until 1850, when he came to Springfield, Ohio. Just before the doctor left Mount Savage the workmen and others of the New York and Maryland Iron and Coal Company presented him a gold watch, in testimony of respect for his kind treatment and efficient labors among them.

From Somerset he also brought letters of recommendation, but in perfect keeping with the modesty of the man, he never made any use of them.

He was an unassuming man, always ready to listen to counsel. Personally, I have always had for Dr. Bruce the very highest regard and esteem, by reason of his gentlemanly and professional bearing. For more than twenty years I have been acquainted with him, and for the last nine years very intimately, having had our offices side by side for the last nine consecutive years, and during all that time I do not know of a single circumstance which produced one unpleasant feeling between us. I am sure there never was one on my part, and I am fully satisfied that there never was on his part. I only knew him to love him for his many excellencies, and the more intimately I knew him the stronger those attachments became. Although we were competitors in business, yet that competition was always of the most friendly character, making me almost feel that we were not competitors at all, but had one common interest.

In the loss of our esteemed and valued friend and brother, I feel more like I had lost a brother by the ties of consanguinity than a competitor or a comparative stranger.

Dr. Bruce had been quite a sufferer for the last fifteen years having all that time suffered more or less with rheumatism and dropsy, at times very severely. His last sickness was universal prostration, all the powers of the system succumbing at once. He gradually went down to the house appointed for all the living. He bore his affliction with exemplary patience and resignation, never murmuring or complaining, meeting death as a Christian philosopher, quietly, peacefully, and triumphantly, in sure and certain hope of a blissful immortality. Peace to his ashes.

"O may we triumph so
When all our warfares past,
And struggling find our latest foe
Under our feet at last."

Remarks were also made by a number of other members present, upon the subject introduced by Dr. Owen. All bore testimony to the high personal and professional character of Dr. Bruce.

Dr. Reeves reported two cases of disease of the urinary organs. This report was discussed by Drs. Bryant and Senseman.

Dr. Banwell reported a case of cancerous stomach and liver. Dr. B., assisted by Drs. Hazzard and Bryant, had made a post-mortem examimation of this case, and they removed the diseased organs for presentation before the society. The following notes were taken of the autopsy by Dr. Hazzard, and read to the society

November 5, 1873. At 5 o'clock P. M. commenced the post-mortem examination of the body of James Deihl, who died seventeen hours previously.

The subject was forty-seven years old and had suffered from a pain in right hypochondriac region for several years, but was able to attend to his business (that of painting) until within the last few months.

He was a hard drinker, consequently his habits of life were, to say the least, very irregular. The appearance of body at this time is as follows:

Very little rigor mortis, much emaciated, and a cachectic condition of system well pronounced; right hypochondriac prominently enlarged and hard to the touch. The ordinary incisions were made for laying open the thoracic and abdominal cavities. Dissection revealed the fact, that the whole anterior aspect of the liver was adhered to contiguous surfaces, which being broken up exposed an enormously large liver, occupying the right hypochondriac epigastric and left hypochondriac regions, entirely overlapping the stomach, transverse colon, and spleen. As seen *in situ*, it is darker in color than natural, and the whole superior and anterior surface are bestudded with unequal nodules, giving to the whole a very roughened appearance. Its immediate surface is softened, so that in breaking up the adhesions over the right hypochondriac, the large nodule there situated presented a worm-eaten or honey-combed appearance. Further dissection proved the right lobe of the liver strongly adhered to the pyloric end and body of the stomach, but the fifth lobe and the posterior surface of the left lobe and all the parts surrounding Glisson's ligament seemed to be healthy. The gall-bladder was moderately distended, but healthy. The liver, when removed, weighed ten and a half pounds. A section of this liver presented to the society for inspection will reveal the nature of this diseased mass. In the pyloric end of the stomach, and probably occupying two-fifths of that organ, we found a large cancerous tumor, an examination of which will render any further description unnecessary. There appeared to be an abnormal contraction of the colon, especially the transverse. The omentum was very much attenuated; kidneys healthy; spleen and all the other abdominal organs unaffected; the rectum full of scybale and the bladder of urine. The right pleural cavity contained one and a half pints of serous effusion; there were no adhesions, however, but the lower lobe of right lung was a very dark purple color. The whole of the lateral and posterior surfaces of the left lung were closely adhered to the corresponding costal surfaces, but the lung presented no abnormal appearance. The heart and its investing membrane were normal. The enlarged liver had encroached very much upon the lower lobe of the right lung.

This case was discussed by all the members present.

Dr. Whitehead reported an interesting case of fracture of the skull from the kick of a horse. The patient was a boy aged six years. The patient is now in a fair way of recovery.

The society adjourned, to meet on second Thursday in December.

Invalid Climates.—A comparison of three places of invalid resort, Mentone, France; Aiken, South Carolina; and Anaheim, in Southern California, for the months of December, January, and February, has been made by Francis S. Miles, of New York. He says that at Anaheim, an invalid could have been out of doors all day during 81 days, and would have been confined in doors by bad weather 9 days. At Mentone there were 67 fair days and 23 bad days; and at Aiken, 53 fair and 37 bad days. The average temperature at Anaheim, during the three winter months, was 61 degrees; at Mentone. 48½ degrees, and at Aiken, 53 degrees.

Selections.

Sketches of British Obstetricians.—James Cook, who called himself a "Practitioner in Physick and Chirurgery," practiced with considerable success at Warwick in the middle of the seventeenth century. He published "Mellificium Chirurgiæ: or, the Marrow of Chirurgery," which passed through several editions. The following curious experiences of a man-midwife at that period may be found in this book:—"I have been oft called where there hath been no great need, and compelled to do what I would have forborn, of which take this. One good wife, Elliot, of the Asps, near Warwick, where I found two midwives. After I had desired them to acquaint me with the woman's condition, they said it was desperate, she being almost spent, the child dead, and travail or pains gone. I went to her and observed her pulse, which though low was equal; making trial, I found the child lay well, and I supposed alive. I earnestly desired them to let me return, promising them somewhat to provoke pains, and doubted not but of good issue. But no entreaty would serve. Assaying to be gone, the women took me and brought me by violence to the bedside, telling me they were sure the child was dead, and I should not stir till I had delivered her. I used my instrument, which no sooner entered lightly into the skull, but with little strength, the child came away alive."

This second relation shows what rough instruments were occasionally used in midwifery:—"Being commanded by the Lady Dowager Brook to wait on her to London to take the consult of physicians, in the way before we came to Tossiter, we met with the tidings of that fatal fire of London, which caused her honor to resolve for Hackney. After some time of her being there I was desired by Mrs. Hatton to go visit one near her time of her first child who was aged. She begged of me to come to her if there was need. I told her there were several much abler than myself, and fitted with instruments which I wanted, that might be had from the city. (He doubtless here refers to Peter Chamberlen.) After two or three days, in the night she sent for me. I being very much indisposed and the night tempestuous, I denyed; but being much importuned by a gentlewoman, I went. When come, I made tryal and found the child came right but without advantage, though pains were strong. I made use of what came next my thought, getting it a little better fitted at a smith's shop hard by, with which I brought away the child, though with much difficulty."

His management of the third stage of labor is as follows:—"The child born, bring away the after-birth, and in this trust not to the string, but rather by its being directed; put up your hand gently, and lay hold on the secundine, and bring it away gently by degrees. For certainly the hand may go up where the body comes out." When the child is weak, before dividing the cord, he advises the midwife to "first put back the blood toward the belly."

But besides being an expert obstetrician, he was also an experienced gynecian, and he had the sagacity to recognize the value of, and quote that remarkable passage in the "Medical Chirurgical Observations" of Henry van Roonhuyse, concerning the "clausura uteri." He translates and abridges it as follows:—"The inner orifice (os uteri) may be closed, yea so as not to admit of a small probe. It may be caused with cold humors, stale seed, or like menses, whereby it becomes swelled together when they are heaped upon it; for those in whom the mouth of the womb is hard, must of necessity have it shut up. For at the time of the menses, it sometimes comes to pass that nature only discharges itself of the thinnest blood, retaining the grosser and thicker part. Whence it comes also that lurking winds remain gathered in the womb, which cause great pains both in the belly and sides thereof. In some women it is so hard, tapering out and sunk down, that there can but little good be done by emollient and discussing fermentations, or like oyntments, but 't is to be enlarged by *rad. gentian.* or *præp. spung.*[*] by which it may be widened and come to its due purgations. Being thus widened, there may be easily put in an instrument of silver, ivory, or horn, after the fashion of a screw, the one end thicker than the other, within hollow, by which the menses, &c., may be fitly evacuated, being assisted by coughing, sneezing, laughing, &c. This may be carried without any inconveniency; and 't is better than incision, which is dangerous, although that may be attempted, all other means failing, if there be little sensibility of the part, or if there be no sharp pain, or appear a thin, fluid, or fetid matter, with a blackness on it, for then the evil is incurable."

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[*] "Prepared spunge is made by being dipt in Empl. Melilot. S. melted, after pressed between two trenchers, anointed with oyl; after cold take it out of it; cut tents to put in."

The first edition of the "Marrow of Chirurgery" was published in 1647, and was written "a few years before our late intestine broils." In 1655, James Cook published "Supplementum Chirurgiæ, or the Supplement to the Marrow of Chirurgerie, wherein is contained Fevers, &c.;" and in 1657 appeared "Select Observations on English Bodies of Eminent Persons in Desperate Diseases, first written in Latin, by Mr. John Hall, Physician; after Englished by James Cook." This John Hall married Shakespeare's favorite daughter, Susannah, and carried on his practice after the poet's death in Shakespeare's "great house." He died several years before his wife, and the way in which his MS. came into the possession of Cook he thus describes:—"Being in my art an attendant to parts of some regiments to keep the pass at the bridge of Stratford-upon-Avon, there being with me a mate allyed to the gentleman that wrote the following observations in Latin, he invited me to the house of Mrs. Hall, to see the books left by Dr. Hall. After a view of them, she told me she had some books left. I told her if I liked them I would give her money for them. She brought them forth, amongst which was this, with another of the author's, both intended for the presse." Among the observations is one concerning "Elizabeth Hall, my only daughter."

There are two likenesses of Cook, one at the age of sixty-four, in the 1679 edition of the "Select Observations," and one when seventy-one, in the 1685 edition of the "Marrow of Chirurgery." He had a fine head, with large but regular features, a slight moustache, and long hair. He is represented in a doctor's gown and long white doublet. Beneath the last-mentioned portrait is the following inscription:—"Vera effigies Jacobi Cooke, medici ac chirurgi peritissimi; qui, quæ indefesso studio et multorum annorum experientia comperit usui fore, ad presentem sanitatem tuendam amissam que recuperandum, non invidet humano generi. Ætatis suæ 71.—J. H. AVELING, M. D., *in Obstetrical Journal.*

Medical Testimony in the Stokes-Fisk Case.—We take the following summary of the medical evidence in the above case from the *Scientific American:*

The scene of the tragedy was at the Grand Central Hotel, on Broadway, in this city. Fisk had just entered the premises, and was in the act of ascending the stairway of the ladies' entrance, when he was shot by a man standing on the landing above. The ball entered his abdomen just above the navel, and passed obliquely down through the intestines, lodging in the muscles of the thigh. Another ball made flesh wounds in the arm. The assassin was Edward S. Stokes, who was almost immediately arrested and lodged in jail, while the wounded man at once received medical assistance in the hotel, where, after lingering until the following day, he died.

From the evidence, it appears that Fisk was attended by seven doctors and surgeons, all prominent men in this community, namely, Drs. Carnochan, Tripler, Steele, White, Sayre, Fisher, and Wood. In the multitude of counsel there is generally supposed to be wisdom; but it seems to have proved otherwise in this case. Dr. Tripler began operations by deeply probing the distressing wound, an injudicious proceeding, according to some of the medical experts. Subsequently, Dr. Fisher, Dr. Wood, and Dr. White each used the probe. Several glasses of brandy and water were administered, also chloroform and morphia. The latter was administered by the mouth, and by subcutaneous injection, six times within four hours.

Dr. Wood testified that he told Drs. Fisher and Tripler, who were the choice of Mr. Fisk as attendants, that they had two lives on their hands, Fisk's and Stokes', and must administer the opium with their fingers on the pulse, and watch carefully the condition of Fisk's pupil and of his intelligence. He ascribed Fisk's death to shock, but admitted that the latter symptoms, such as stertorous breathing, were symptoms of opium poisoning. He had heard of many cases of recovery from serious wounds in the intestines; he had seen, in cases of hernia, a portion of the intestines slough away and the patient recover; he did not, in the light of authencated cases, consider Fisk's wound necessarily fatal.

Dr. John M. Carnochan, the distinguished surgeon, reached Fisk's bedside some seven or eight hours after the shooting. He did not think, when he saw Mr. Fisk, that he exhibited the symptoms of shock; he had re-acted; he thought the giving of two and a half grains of morphia, thirty drops, hypodermically, was a most dangerous way of using opium; it was, he believed, at least the cause of his premature death, that is, that it hastened his death. He thought Fisk could not intelligently have made his will if he was laboring under shock. He related cases that he had known of penetration of the bowels which had not proved fatal.

On cross-examination, Dr. Carnochan said that he found Fisk, when he reached him, in an unnaturally somnolent condition; the wound did not kill him, the morphia did; there was a possibility that the wound had something to do with it, but he had none of the usual symptoms immediately following injury from a gunshot wound; there was nothing to indicate that he was suffering in any manner from the wound; it was a very dangerous wound, but not necessarily a fatal one. Q. You would expect him to get well? A. Of course I would.

Dr. Gurdon Buck testified that the wound was alone sufficient to account for death, and that the use of opium he regarded as a proper treatment; but some of the symptoms agreed with those of opium poisoning.

Dr. A. B. Crosby testified that he would consider such a wound fatal.

Dr. Thompson, professor at the university, explained that death from shock arose from enfeeblement of the heart, while death from narcotism arose from coma, or from the head. Probing, in abdominal wounds, while the shock lasted, he thought should rarely be resorted to. Chloroform was contra-indicated by shock. It should not be used while shock lasted. He thought he had seen death result from the administering of twenty drops of chloroform. He described at length the symptoms of opium poisoning, which ends in coma, and declared that, in death by shock, though there might be insensibility, that was different from coma. Snoring was utterly inconsistent with shock. Deep breathing was the clear mark of recovery from shock. He declared that the symptoms described indicated that Mr. Fisk had recovered from shock. He thought the length of time excluded entirely the idea of death from peritonitis, and the only conclusion was that he died from an overdose of morphia.

Dr. Macready was examined, as an expert, on the effect of the wound, and the effect of the morphia administered. He was inclined to think, from their describing the doses by drops, that one-half more had been given than was supposed, as ten drops would be fifteen minims. The administering of morphia hypodermically nearly doubled its power. He was strongly of opinion, from the description of the case, that Fisk did not die from shock or peritonitis. There was not enough peritonitis to produce death, and the development of the symptoms were not those of shock. The symptoms were those of inflammation of the brain or uræmic or narcotic poisoning. There being no disease of the brain or kidneys, he ascribed the death to an excess of narcotics.

Dr. Marsh, deputy coroner, testified that he made the *post-mortem* examination. In his opinion the death of Fisk was due to shock and peritonitis. But the latter was not sufficient of itself to have caused death. As to narcotism, he did not make any examination. Subcutaneously administered, one twenty-third part of a grain of morphia had been fatal. Taken in the stomach, two grains had been fatal. As to wounds in the abdomen, in the Crimean war, ten per cent. of those wounded had recovered; in the recent rebellion war, twenty-five per cent. had recovered.

Judge Davis, in submitting the case to the jury, made an elaborate and excellent charge. He solemnly warned them against allowing themselves to be influenced by any feelings of prejudice, either for or against the prisoner. They must be wholly governed by the evidence before them. In reference to that branch of the defense here under consideration, the Judge was very clear and explicit. "If morphia improperly administered, either as to the manner or as to the quantity, caused the death of James Fisk, Jr., on the 7th of January, 1872, not as an accelerating cause, but an independent cause, being in itself the sole agent producing death at that time, then the prisoner is not chargeable with the death, because another and an independent agent produced that result, in which his act, the wound he caused, did not concur. . . . I charge you, as the law on this subject, that if you come to the conclusion that the medicines administered were the sole cause of death, and, at the same time, that the prisoner intended to kill, that he fired the fatal shot with intent to kill, and inflicted a wound with that design, then it is your duty to convict him of an attempt to commit murder in the first degree." In view of this charge, and the medical evidence, it would seem as if the jury had reason for giving the verdict they did, independent of the other points of the defense, which were well sustained.

Note on Lancing the Gums in Difficult Dentition.—DEAR SIR: The excellent communication of Dr. James W. White upon Pathological Dentition, and the valuable extract from an incisive article of Dr. J. Foster Flagg's, have brought the subject of cutting the gums in children whilst teething so prominently before your readers that I think perhaps an incident from my own experience may be interesting enough to warrant its publication in your columns. From the circumstance that the little patients in these cases are generally too young to appreciate our efforts for the mitigation of their sufferings by the aid of the gum-lancet, any subjective facts in favor of operations of this character must necessarily be rare, or at least difficult to collect; but, as a nucleus for the aggregation of such testimony, permit me to report the following:

My youngest child, a little girl, commenced to teeth after attaining the age of one year, and suffered severely during the process, often obtaining apparent relief, however, from free incisions into the tense and swollen gums. On one of the latter of these occasions, when she was about twenty-six months old, I found, on returning near midnight from a late visit, that she had been awake and fretful most of the evening, complaining at short intervals of her teeth. Upon my entering the chamber, she at once (to the profound surprise of her mother and astonishment of the nurse) cried out, as well as she could between her sobs, "Papa, lance 'em! papa, lance 'em!" and bravely held open her mouth for the operation. When performed, this was followed, as the poor child had learned to expect, by such prompt and complete ease that she soon sank into a quiet slumber, which continued until morning, forming a marked contrast—most agreeable for all concerned—to the distressed restlessness she displayed up to the moment of incising her gums.—JOSEPH G. RICHARDSON, M. D., *in Medical Times.*

To the Editor of the Lancet—SIR: The following appears upon a quack preparation which is being sold by peddlers throughout the Province of Ontario, over the signature of a leading member of the profession: "Having examined a recipe for ingredients in a liniment made by Mr. ——, I consider them simple and safe for use, and when combined, will form a very useful liniment for external pains."

The practitioner referred to being known in this locality, the *liniment* is found in almost every house, and is tried for every ailment before medical aid is sought. In one case, fresh in my mind, a child was treated with the liniment, thus recommended, for *external pains*, until further treatment was useless. The patient died of meningitis an hour after a physician was called. Please give your opinion in regard to the above in the *Lancet*, and oblige,

A SUBSCRIBER.

[The practice of medical men indorsing patent medicines, liniments, swing-cradles, belts, supporters, prepared foods, cocoa, chocolate, cod-liver oil, etc., when intended as a recommendation to the general public, is entirely wrong in principle. Such recommendations, when considered worthy, should be confined to the profession, and appear only in well-regulated medical journals. The appearance of names of medical men in the public prints, in such a connection, always suggests the idea that they have some personal interest in the matter, or are seeking a little notoriety; and for these reasons members of the profession should be very chary about indorsing any remedy or appliance. Besides, as in the above instance, much injury is likely to follow the indiscriminate use of remedies without the advice of a physician.—ED. CANADA LANCET.]

Large Professional Fees.—It is not often that a professional man has the opportunity, or perhaps feels equal to the effort, of returning two fees of a thousand guineas each, in the course of the same year. It is understood, however, that this has occurred with Sir Henry Thompson this year. The first occasion was in connection with the illness of Emperor Napoleon III., when Sir Henry, in the most delicate and kindly manner, returned half of his fee of two thousand guineas; and the second is an instance yet more highly honorable to professional delicacy. Called to the bedside of a wealthy friend in the Highlands, near whose shooting-lodge he was passing his vacation, he spent nine days in unremitting attendance. At the end, a check of a thousand guineas was handed to him, but was firmly declined, on the ground that the attendance was given to a friend and during a holiday.—*London Medical Record.*

Timely.—"Take every opportunity of learning to treat disease pleasantly—seek to make your medicines, your drugging of your patients, as elegant, as little nauseous, as little like medicines, as possible."—*London Med. Times and Gazette.*

"A strange and fatal disease, resembling fever," is reported at Kelton, in Utah. Persons die in a few hours after being attacked. —*Philadelphia Med. and Surg. Reporter.*

A Practical Sphygmograph. By E. HOLDEN, M. D., Newark, N. J.—SIR: Presuming that to those medical men who have looked with sanguine expectation to the sphygmograph as a means of scientific research, and to all lovers of progress in medical science, the advent of an instrument practical as to expense, durability, and facility of application will be a satisfaction, I send you drawing and description of one which for two years has been used with gratifying success. A crude and imperfect idea of this was once presented in this journal, and since then much time and expense have developed the perfected instrument. That it has been used so long, and after several thousand tracings has required no repair, will perhaps be sufficient evidence of durability; but the profession may be interested in the conclusions grown out of so many observations, and although conscious that a greater multitude of experiments alone can determine the position of sphygmography as a distinct science, yet the following have appeared to me to be facts regarding it:

First. That it is to be relied upon in many questions of diagnosis of obscure and simulated diseases.

Second. It furnishes a means of ascertaining the condition of the arterial and venous circulation, the ability of the heart to equalize these, and the extent of impairment in disease of the heart itself.

Third. It exhibits with accuracy the initiative action of remedies prior to any external and sensible manifestation of the same. Thus, in experimenting with quinine, a half-grain taken dry upon the tongue was found to show an effect upon the circulation as promptly, but in a different manner, as larger and repeated doses. The action of gelseminum and aconite was readily comparable by the tracings taken at intervals of three minutes. *The opening, therefore, of a new field in experimental and therapeutical medicine is at once shown.*

Fourth. The condition of the nervous system, in its relation to the economy as a vital power, is readily exhibited, and with a dictionary of tracings, such as would result from extended experiments, the instrument may prove invaluable both in prognosis in serious disorders of the brain and spinal cord, and in the diagnosis of the numerous occult affections of these structures.

Fifth. Such an instrument may prove of great value in life insurance in ascertaining the eligibility of applicants.

Several facts of a general character have also developed during my investigations, and no one using the sphygmograph can expect to be otherwise than disappointed without fully appreciating them. Thus:

First. No tracing, however smooth and ample, is of necessity the correct record of the patient. Two tracings in the same minute, *if under different pressures, may differ widely.* Hence it is essential to take several at gradually increasing pressure, *that being accepted which is of greatest amplitude.* Others may then be continued at that degree. (The above instrument is so constructed as to allow of a pressure equal to two or more pounds, and adjustable with the greatest ease without removing.)

Second. The pressure exerted is so vital an element that tracings of patients at different degrees are rarely comparable.

Third. Tracings of radial arteries in one patient are not comparable with those of the ulnar, femoral, or carotid in others.

That the profession may have the amplest means of determining the significance of sphygmographic writings, and in the belief that with an instrument easily applied and accurately adjustable in its means of recording the compressibility of the artery (a point in which all previous inventions have been defective)—that with such an instrument a great and new field of medical science is opened, Messrs. Otto & Reynders, of New York, have undertaken to supply it at a price hardly sufficient to compensate them for their labor; the great difficulty in the way having thus far been the cost of watchwork on this side of the Atlantic, and the limited number likely to be required.—*Medical Record, Oct.* 15, 1873.

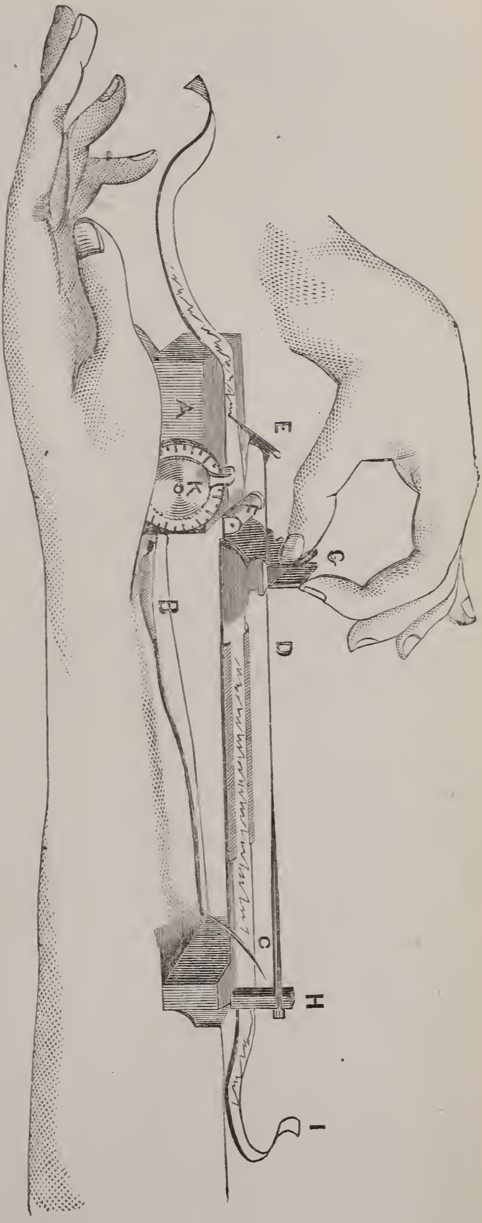
1. Preparation. Take the instrument in the left hand, the thumb being on the holder and the first finger under the body of the instrument.

a. Slip the paper (which must be of appropriate thickness and quality to insure good results) into its place, one end under the roller, and

b. Slide the standard holding the tracer as far as it will go toward the median line of the instrument to be out of the way till all is ready.

c. Dip a camel's hair brush or pen into easily flowing ink and apply to the gold pen, taking care to wet its point—move it also from side to side to be sure that it is in order (red ink is most satisfactory).

d. Have the patient stretch the hand across some firm substance as a table, if convenient (when operating on one's self the left hand is preferable).



2. To obtain tracing.

a. Seize the instrument by the holder with the thumb and finger, steadying it with the middle finger against a corner, and apply firmly over the artery, always selecting a point, if possible, where it lies against a bony or hard tissue. A little experience will enable the operator to obtain the greatest amplitude of tracing.

b. Press with even firmness, and when the lever moves freely turn the registering dial with the disengaged hand until the amplitude of the movement is at its maximum. When this is observed

c. Bring the standard which holds the tracer against the sloping end of the pulse-lever, and

d. Start the watch-work.

Do not be satisfied with one tracing, but take several, and if they differ continue at different pressures until the result is uniform. This is absolutely essential to correctness (the first two or three waves usually lack significance).

If the pen does not write, it may be readily detached by sliding off the standard and tracer and gently pressing it (the pen) between the thumb and finger. This spreads it apart so that it will fall into the hand, and it may then be examined, as in case of any other pen.

Paper of requisite width, quality, and thickness may be purchased of us.

Editorial.

Valedictory.—With the issue of this number of the LANCET AND OBSERVER, my connection with its management ceases. The editorial control and business interests of the journal are transferred to Dr. J. C. CULBERTSON, to take effect with the beginning of the new year 1874. After a continuous editorial experience of eighteen years, I can not sever my connection with journalism without a sense of sadness—and I take this occasion to say good-bye, with a few brief words of valedictory.

In this connection I may be permitted, without egotism, to repeat a few points by way of an historical review. In 1842 the late Prof. L. M. Lawson established the old *Western Lancet*, which he conducted with ability for years. Subsequently the proprietorship passed, first, into the hands of Dr. Thomas Wood—then to the late Prof. Geo. C. Blackman. In 1856, in connection with Drs. Mendenhall and Murphy, the undersigned established the MEDICAL OBSERVER, which was satisfactorily continued two years, but at the end of 1857, the temporary fusion of the Miami with the Ohio College made it desirable for my friends to unite the fortunes of the two journals, which was effected under the combined name of the CINCINNATI LANCET AND OBSERVER; and since that date the responsible management of this journal has been mine, whether for good or bad. Years ago I determined its outline of policy namely, to be the organ of the profession. I have steadily adhered to that purpose; so that, at all times, gentlemen of all the regular schools of this city and elsewhere have had precisely the same and equal facilities as gentlemen with whom, from time to time, I may have been associated in college interests. In a word, this journal has never been knowingly prostituted to the purposes of a selfish personal or college organ. In all these years it would be singular if I have not at any time given offense, and yet I look back with complaisance, and feel that but few, if any, heart-burnings have been suggested; and as I close up my editorial career, I feel glad to say that, so far as I know, I am in entire harmony with all my confreres.

I take great pleasure in commending my friend, Dr. Culbertson, to the regards of my patrons. He is a gentleman of culture and high tone in all respects. I feel sure he will add such zeal and new blood to the management of the journal as will carry it forward to a completer degree of success than heretofore. I leave the journal as the oldest medical monthly in America, and I think the best established; and I ask my old friends to make it better in all respects than ever.

Good-bye to my editorial friends and contemporaries. To my old and friendly subscribers, good-bye! To my long-time associates in the State Medical Society of Ohio—to all my professional friends of the West—to all—a kind, sincere, and affectionate adieu.

EDWARD B. STEVENS.

[We have received the following criticisms, suggested by some proceedings of our Academy of Medicine. We give place to the letter without note or comment.—ED. L. & O.]

"You seem to be almost run ashore on a case of syphilis. Many men have been so before.

"I wish to call your attention to a very old thing, viz: Guaiac. Many men give this valuable thing the go-by, and think it belongs to old rubbish. Now, I have had some experience with guaiac in treating syphilis. Let me here remark that one of, if not the greatest difficulties in the way of curing syphilis, is to get the patient to persevere in the use of the means. I believe a chief reason why guaiac has almost fallen into disuse is that it is so hard a thing to get into the stomach. Just think of a man being obliged to swallow several pints per day of a decoction, and this for months. But this is not so bad as the tincture; for, mix it how you will, it is a repulsive dose to take. Now, a *few* doses of either tincture or decoction will be taken well enough, but the long continuance of either becomes intolerable. But do n't give it up; make it into pills. For nearly ten years I have employed the pills, and at the present time I use about a peck per annum. There is no difficulty in getting the patient to take the pills to any extent.

"Now, if you see fit to try my plan, observe carefully the following: The *success of the pill depends upon how it is made.* If you make the pill with the ordinary excipients, you will fail; for it will be nauseous, and the patient will tire of it. Alcohol, and nothing else, is the only proper excipient. Excuse me if I give you a little lecture on pharmacy. The way to make the pill is as follows: Pulverize the guaiac and sift out ligneous and cortical impurities; then let the operator be in a warm room, have the mortar warm and the pill-machine warm; put the powdered gum into the mortar, add very sparingly of alcohol, beat away, and add more if necessary, but be careful and not get in too much. The object aimed at is to form a mass as stiff as can be worked by means of warmth and a very little alcohol. When the mass is formed, work it rapidly into pills and roll them into a cold tin pan in a cool room. If you make these pills any other way it will prove more or less a failure. By the way, use no pulverized licorice or other powder. If you use never so little too much alcohol, your pill will be soft and never harden.

"Now, of this pill the patient can take from nine to eighteen per day, usually twelve, and will declare he feels better all the time; so much so that if he runs out of pills he will soon call for more. This treatment applies to secondary and tertiary; is excellently adapted to external or cutaneous manifestations.

"Indulge me further. Those who suppose they get no good of mercury (or no effect) with subtyalism are mistaken. I don't know whether many physicians have taken notice that corrosive sublimate given in solution promotes active diuresis; also, that it stimulates digestion, as is proven by the fine, well-digested, consistent stool: this latter may not be constant, but it is frequent. Now, what more or better can a medicine do than to accomplish these two ends? Yours,

"ALEX. MCBRIDE."

Music.—We have been favored with a supply of fresh music from the house of Church & Co., 66 West Fourth street. We have "Tim Flaherty," "Dear Little Shamrock," "We meet no more," "Barkis is Willin'," with other songs and music well known to performers. We can honestly commend the house of John Church & Co. as the best house in Cincinnati for pianos, musical instruments, and music.

Errata.—The review of the Ohio State Medical Society should be signed, not "W." S. C., but "G." S. C.

"*Get the Best.*"—Years ago we felt that a copy of Webster was indispensable for our library purposes. We have recently had an opportunity to examine a new edition of "Webster Unabridged," and feel surprised to study the vast amount of material incorporated in this new edition. What could a scholar do without a copy of this standard, not only to keep him correct, but for various sorts of study?

"*Another case* of death from chloroform in Cincinnati."—*Boston Med. & Surg. Journal.*

Yes. And another case of death from ether in a dentist's chair in Boston. Yours truly.

Miami Medical College.—We have already noticed the arrangements of Prof. Hough to conduct analysis of poisons, ores, urine, and all matters of his department. We notice with pleasure that he has constituted as his assistants in the laboratory, under-graduates J. C. Miller and Joseph Levi, who will conduct the manipulations of the laboratory under the direction of Prof. Hough as chief.

Literary Exchanges.—It is the privilege of the publisher to have the advantage of a discount on commutation to subscribers. First we call your attention to

Godey's Lady's Book.—Enters on a new year with January, 1874, and it offers a chromo premium that is an exception. "*True to Nature*" will do to frame for any parlor. Each subscriber gets the chromo. Subscribers to the LANCET AND OBSERVER get both for $5.50 as heretofore, and receive the chromo worth all the price.

Commutations.—In this same connection we may say that other valuable periodicals of the day are afforded at a like discount: Harper's publications, $3.25; Scribner, $3; Atlantic Monthly, $3. In this connection we feel sure our subscribers, who want other publications than this, do not appreciate the value of the American reprint of the London *Lancet.* The Cincinnati LANCET AND OBSERVER with the London *Lancet* will be furnished at $7, as heretofore, and we are confident no investment in journalism is so good.

Prescott's Works.—Every person of literary taste and reading habits knows something of the works of Prescott. They are among the products of American culture of which Americans are proud. We are pleased to know that the Lippincott house, in Philadelphia, have commenced the issue of a new and uniform edition of these works, in a style that will be acceptable to all lovers of good reading. Thus far we have before us the three volumes, comprising the "Reign of Ferdinand and Isabella the Catholic." Each of these volumes is embellished with a fine steel-engraving. Vol. I has Isabella; Vol. II has Ferdinand, and Vol. III has Columbus. The mechanical execution of these volumes is such as to make them an ornament to any library. Each volume is issued at $2.75, and the full set will be completed in fifteen volumes.

Personal.—After the 1st of January the address of Dr. E. B. Stevens will be Syracuse, New York. Personal letters will therefore be thus directed from and after that date.

Vick's "Floral Guide."—We have received this very beautiful little manual for 1874. Floriculturists all over the country have so well learned to appreciate Vick as the authority and headquarters for everything nice in that department, that comment is out of the way. However, we advise our friends to write to Mr. Jas. Vick, Rochester, N. Y., for the Guide, and be guided in their selections of bulbs and seeds for another year.

Physician's Visiting List. Lindsay & Blakiston.
Physician's Hand-Book. W. A. Townsend, New York.

These little hand-books are well known to the profession, and each has its peculiar excellencies; and according to the experience of individuals, will be their preference for one or the other.

"*The Pre-Adamite Earth.*"—This is the title of a very readable poem from our old-time friend, Dr. W. L. Schenck, late of Ohio, now of Kansas. We had supposed Dr. Schenck was one of our old prosy sort of fellows. The poem before us shows how often we are mistaken in the poetic fire that lingers about the aspirations of our early days. Good day, doctor, and long life.

Surgeon-General's Report and Memorial.—We have before us the annual report of Surgeon-General Barnes for 1873. We find in it the usual careful and condensed statement of the army statistics for the year—matters pertaining to the finances of the army; its health, pension matters, the publication of the medical and surgical history of the war. By a memorial, however, which we have received at the same time, we are specially prompted to remind the profession of the grievous disability under which medical officers of the army now rest. The American Association, at its meeting in St. Louis, took very decided ground on this subject; but we shall have no legislation advancing the rank of medical officers until the profession at large interest themselves earnestly with their congressmen, and educate them to understand that some decided action should be taken to reorganize the position of the army staff. We heartily indorse the objects of the memorial.

To Subscribers.—All old subscribers, whether in arrears or otherwise, will receive the January number. Those in arrears after 1st of January will remit to the new publisher just as if no change had occurred—all old claims being transferred with the proprietorship. Also, as a new mail-book will be made after this month, we ask subscribers to correct any mistakes, or omissions, or errors in post-office address.

Cooling Lotions in Typhoid Fever.—Jaccoud recommends aromatic vinegar as a cooling lotion in typhoid fever. This is to be applied by means of a large sponge, and the patient is then wrapped in a woolen blanket till he is quite dry. Each application should occupy about two minutes, and it should be repeated two or three times daily, according to the temperature of the patient. The lotions are to be kept up (unless the reaction is too severe) until the fever has entirely disappeared.—*L'Union Medicale, August* 28, 1873.

Warm Baths in Diseases of the Chest.—M. Lasègue concludes, from a series of experiments performed in his clinique, that warm baths produce a diminution in the profuse perspiration of phthisical patients, and have the effect, moreover, of lowering the temperature and the pulse, quieting the anxious patient, and thereby inducing sleep. The temperature of the bath ought to be about three degrees below that of the body of the patient.—*France Medicale, August* 9, 1873.

Reviews and Notices.

A Manual of Midwifery, including the Pathology of Pregnancy and the Puerperal State. By Dr. CARL SCHROEDER, Professor of Medicine in the University of Ehlingen. Translated by CHAS. H. CARTER, B. A., M. D., B. S., London. Twenty-six engravings on wood. New York: D. Appleton & Co., 1873.

This excellent work, translated from the German, is of great value to the practical practitioner. It can scarcely be regarded as a text-book, but as a hand-book for the practitioner we can scarcely suggest anything more valuable. So we find the author discourses in a familiar way of the anatomy, physiology, pathology, etc., of obstetrics, as all the accidents and dangers of the lying-in room are fully detailed, we can only indorse the value of so convenient a work.

For sale by Robert Clarke & Co. Price $3.50.

Body and Mind: An inquiry into their connection and mutual influence, specially in reference to mental disorders. An enlarged and revised edition. To which are added psychological essays. By HENRY MAUDSLEY, M. D. London: McMillan & Co., 1873.

This little volume consists of two parts: four lectures upon the general subjects as given in the title; and part second, four essays illustrative of the lectures—Hamlet, Swedenborg, Vitality, Limits of Inquiry.

This is a second and enlarged edition. The first was noticed in this journal; and in comparing this with the former edition we find added one lecture on conscience, and two essays—one on Hamlet and one on Swedenborg.

To all students of mental science this book will be very welcome.

For sale by Robert Clarke & Co. $2.00.

Sex in Education; or, A fair Chance for the Girls. By EDWARD H. CLARKE, M. D., late Professor of Materia Medica in Harvard College, etc., etc. Boston: J. R. Osgood & Co., 1873.

This little contribution to an important inquiry by Prof. Clarke, has been received everywhere with remarkable favor. It seems to have grown out of a lecture or address originally delivered before the New England Woman's Club of Boston. The author evidently and forcibly opposes the co-education of the sexes. He says: "Co-education then signifies, in common acceptation, identical co-education. This identity of training is what many, at the present day, seem to be praying for and working for. *Appropriate* education of the two sexes, carried as far as possible, is a consummation most devoutly to be desired; *identical* education of the two sexes is a crime before God and humanity, that physiology protests against and that experience weeps over." This quotation is perhaps the key to the whole train of thought in this little book. The point is, we think, both well taken and abundantly fortified by physiological, clinical, and general illustrations and arguments.

For sale by Robert Clarke & Co. $1.25.

The Diseases of the Prostate: Their Pathology and Treatment. Comprising the Jacksonian prize essay for the year 1860. By Sir HENRY THOMPSON, F. R., C. S., etc., etc. Philadelphia: H. C. Lea, 1873.

Our author is perfectly competent to teach all matters pertaining to this department. In the book before us, we have a careful consideration of matters pertaining to the anatomy of the prostate gland, together with the various morbid states that are presented for our therapeutics, and all the inflammatory conditions, as also the usual results of inflammation. Thus we have suppuration, hypertrophy, tumors, cancer, tubercular disease; together with all the usual and unusual diseased conditions of these parts.

Surgeons desirous of being familar with the pathology and treatment of these diseases will find Dr. Thompson excellent and reliable authority.

For sale by Robert Clarke & Co. $5.75.

Lacerations of the Female Perineum, and Vesico Vaginal Fistula: Their History and Treatment. By Dr. HAYES AGNEW, M. D., Professor of Surgery in the University of Pennsylvania. With numerous illustrations. Philadelphia: Lindsay & Blakiston, 1873.

Prof. Agnew briefly introduces his book with the statement that "the subjects of the volume appeared several years ago." In fact, the *Pennsylvania Hospital Reports* contained contributions now embraced in this book; also, at times, portions appeared as articles in the Philadelphia *Reporter*.

The title-page very well indicates the plan of the work as now complete, though a table of contents would have been acceptable. The book is abundantly illustrated, both exhibiting instruments and operative procedures.

For sale by Robert Clarke & Co. $2.00.

Clinical Electro-Theraputics, Medical and Surgical: A hand-book for physicians in the treatment of nervous and other diseases. By ALEX. McLANE HAMILTON, M. D., New York. New York: D. Appleton & Co., 1873.

While the author of this little book proposes to afford a convenient guide for the use of electricity, we are pleased to see that he does not indorse this agent "as a specific for every human ill, mental and physical." Still, he regards electricity as an invaluable therapeutical means in nearly all forms of nervous disease. The work is handsomely gotten up and well illustrated.

For sale by Geo. E. Stevens & Co. $2.00.

Introduction to Practical Chemistry, including Analysis. By JNO. E. BOWMAN, F. C. S., Professor of Practical Chemistry in King's College, London. Edited by CHAS. L. BLOXAM, F. C. S. Sixth American, from the sixth and revised English edition. Philadélphia: Henry C. Lea, 1873. Cloth, pp. 350. $2.25.

This valuable little manual that has been our favorite for years, still retains the high estimation it so fully deserves. It is peculiarly suited to the wants of the busy medical practitioner, and yet so full that it is found on the table of most professional chemists. A peculiar point of excellence, worth more than the price of the book, is the *Test Tables*, page 306, in which the confirmatory reactions of the various bases and acids are alphabetically arranged, and very conveniently and correctly collated.

J. B. H.